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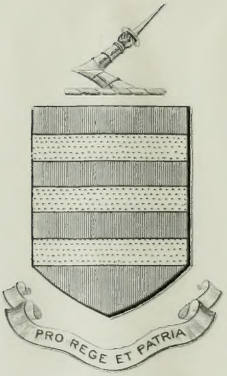

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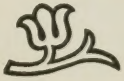

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

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HOSPITAL PLANNING AND CONSTRUCTION IN 1922

By S. S. GOLDWATER, M.D., Director, Mount Sinai Hospital, New York, N. Y.

THE English, who look with mingled amusement and distrust upon our efforts to civilize America, and who are disposed to regard departures from British precedent as more or less fantastic, will not readily become reconciled to the latest novelty in American hospital planning—the hospital skyscraper. During the past year at least two notable hospital buildings ten stories in height have been completed, and others of twelve and fourteen stories begun. But the ambitions of American hospital planners, which in the past have aimed at the "greatest hospital" or the "best equipped hospital" in the world, seem recently to have been diverted into new channels, and the latest boast is that such-and-such a hospital will be the "tallest in the world."

Hospital Skyscraper in Evidence

While the difficulties of planning are enhanced by piling up story upon story and attempting to adapt a single floor plan to diverse functions, there is no essential reason why a hospital building should not be tall, provided it is arranged with due regard for the necessities of practical hospital administration. On the other hand, no particular merit inheres in mere height, except that in crowded cities the upper stories of a tall building are the farthest removed from the noise and dust of the street, which is, of course, an advantage. But even in crowded cities objections might reasonably be made to a twenty-story hospital in which, for example, kitchen, out-patient department, public wards, operating rooms, and quarters for private patients were located one above the other in such a manner as to bring dispensary patients, newly admitted ward patients and their friends, post-operative surgical cases, and private patients and their friends into constant contact, as fellow-elevator passengers. Inasmuch as the purpose of this article is to record events rather than to evaluate plans, it seems best to drop the subject at this point, merely recording as history the fact that during the past year hospital buildings of twenty or more stories have appeared on the horizon as practical possibilities.

A generation ago (it might be safer to say two generations) sky-scraper hospitals would have been impossible on account of the danger of fire—they were, in fact, forbidden by law—but in the type of construction that is commonly practiced today, the danger of fire has been minimized. A brief word of warning about the danger of fire is still pertinent, for with building costs as high as they now are, hospital committees may be tempted to depart from the strict line of safety. One learns from a recently published article on hospital fires that "during 1919 and 1920, 870 fires occurred in institutions classified as hospitals, asylums, and sanatoriums, an average of more than one fire a day in that type of institution. Among the causes of fire in these institutions were: first, sparks on the roof; second, defective chimneys and flues; third, lightning; fourth, heating installation; and fifth, electricity. If any structures should be properly protected, those in which human beings lie incapable of self-protection should be given first consideration."

Commercial Office Building for Doctors

The downtown office building for doctors is a phenomenon which is familiar enough in American cities. In such buildings, which are commercial enterprises pure and simple, the highest returns from rentals are sought. The lowermost

floor or floors are, therefore, rented to banks and commercial institutions; the doctors establish themselves in the upper stories. Now, the commercial office building for doctors is a sort of unorganized pay clinic. Is it not but a step from this type of building to the downtown commercial hospital? So a group of investors in Chicago appear to have thought, for recently there has been published a picture of a ten-story building of composite character, which has been designed to be built on a corner site in Chicago's business district. The plans show a building with stores and commercial offices below, and rooms for patients above.

One might venture the opinion that a site on a busy thoroughfare, suitable for retail stores, is not appropriate for a hospital. But it is no longer the presence or absence of crowds of pedestrians which determine the availability or non-availability of a block for hospital purposes, but rather the number of motor vehicles which use the adjoining street. It is becoming increasingly difficult in large cities to find residental streets or boulevards which are not jammed with motor vehicles. Under these conditions, it is difficult even in select residential neighborhoods, to find sites of small dimensions which are quite satisfactory for hospital purposes. Traffic noises are with us to stay. They are certain to become increasingly important in relation to the comfort of hospital patients, and spacious grounds within which the hospital may, so to speak, retire are more desirable today than ever before.

A striking evidence of the skyscraper tendency in hospitals is the new Beth Israel Hospital being erected in New York, which with its seventeen stories may lay claim to the title of the "world's tallest hospital."

The country is engaged in hospital reconstruction on a stupendous scale. Among fifty or more building operations which have been listed by the present writer, only five represent entirely new hospital enterprises. The others have to do either with the reconstruction or the replacement of old hospital buildings. The inference is that any building committee which today adopts a hospital plan that is lacking in flexibility is presenting a peck of trouble to its successors. It is both noteworthy and praiseworthy that many of the alterations and extensions that have been undertaken this year have been conceived as logical first steps in carefully thought-out comprehensive schemes of expansion.

The advance in building costs which came in the wake of the war brought to a standstill many pressing hospital projects. The peak of prices was apparently reached at the end of 1919 and the beginning of 1920. There followed a period of declining prices during which building operations again became numerous, and during 1922 builders were compelled to compete for the services of desirable subcontractors, and the latter, in turn, to bid against each other for the services of skilled artisans and even of unskilled laborers. From the relatively low price level of January, 1922, costs have steadily mounted, the advance for the year in some communities being as high as 20 per cent. Hospitals which resumed the preparation of plans in the spring and which expected to let contracts in the fall of 1922 at spring prices, have been disappointed.

The lowest figure reported to the present writer during the year for a fully equipped fireproof hospital building of suitable interior finish, was 46c per cubic foot. A fireproof nurses' home of high grade, the contract for which was let in New York state in October, cost 52c. Entire hospital plants have been contracted for at 55c, 60c, 65c, 70c, and even 75c per cubic foot, and for the erection of a 100-bed New Jersey hospital of rather elaborate design the lowest of a dozen bids obtained during the early autumn amounted to 85c per cubic foot.

Flexibility in Planning Increases

Flexibility has long been recognized as one of the indispensable basic qualities of a satisfactory hospital plan. "Healthy hospitals are growing hospitals, and their growth is not necessarily symmetrical; pressure is constant from within and without, and a hospital must be in a position to accommodate itself to every reasonable de-

mand." The writer has analyzed elsewhere the nature of these demands, which are extremely varied and which affect all parts of the hospital. A special application of the principle of flexibility to the hospital ward has been one of the notable features of planning and construction during the past year.

In pavilion hospitals of the good old style each clinical division had its own pavilion, and one of these might be overcrowded while another was partially empty. A multi-storied hospital building in which each floor is physically divorced from all other sections of the hospital, and is occupied by a single clinical division, is almost as inflexible in its interior arrangement as a pavilion hospital in which the pavilions are separated by considerable distances. Maximum flexibility, so far as the utilization of patients' beds is concerned, is, of course, obtained in the hospital which is all single rooms, the typical "private pavilion"; but for this the private patient pays, or should pay. In a general hospital of the municipal, the university, or eleemosynary class, 100 per cent of flexibility is beyond the practical demand. The medical service in such a hospital may be light at a time when the demand for surgical beds is heavy, or vice versa, but there is no likelihood that the demand for either medical or surgical beds will fall so low that either service may be entirely suspended. If in a public general hospital from 50 per cent to 70 per cent of the beds are arranged with a view to their definite assignment to a given clinical service, while from 30 per cent to 50 per cent are so placed that in an easy manner they may be absorbed by services which happen to be under pressure at any time, the practical requirements of hospital administration will be fully satisfied; and this, happily, can be accomplished without resorting to costly single-room hospitals for general public use.

Plans for the new Eye, Ear, Nose and Throat Hospital in the loop district of Chicago show a ten-story structure.

A typical example of the use of intermediate or interchangeable ward sections is found in the plan of a large municipal hospital which was completed during the last year. In this hospital each ward floor contains at its extremities two 16-bed wards, each with adjoining verandas. The sections immediately adjoining these 16-bed wards, as one approaches the center of the twin structure, contain the ward serving rooms and the essential nursing, sanitary and therapeutic facilities. In the middle of the building is a section of 32 beds, which at its extremities is in contact with both ward units. This middle section is subdivided into small wards and "quiet" rooms, and any portion of it may be united with either of the adjoining wards. Without disarranging the nursing organization or introducing any sort of confusion into the daily operation of the wards, it is possible to operate an entire floor as two equal units of 32 beds each; on the other hand, the floor may be operated as a 16-bed ward and a 48-bed ward; these are the extremes, a whole series of intermediate combinations is possible. Since plans which embody this elastic system are being considered for a number of other important hospitals, the adoption of the principle of interchangeable ward sections or of the elastic double ward unit may be set down as one of the achievements of the year.

Similar strategy in planning has been shown in so grouping the public wards, semi-private wards, and private rooms of a large general private hospital that the middle member of the group—the semi-private section—may be expanded or contracted at will. In this plan no sharp physical division exists between the three types of service. How is this accomplished? First, by introducing in the section primarily designed for public ward purposes a number of small wards, (2, 4, or 6-bed wards divisible, if desired, into individual cubicles). Though originally assigned to free or public ward patients, these small units are equally suitable for the accommodation of semi- private patients. Next, there is included in the plan, in what is primarily

the semi-private section, a considerable number of rooms, 12x16 feet; these rooms are large enough to accommodate two beds comfortably and may thus be utilized for patients desiring semi-private accommodations at moderate cost, but the rooms are not too large for reasonably economical use as single private rooms.

Starting at the private patients' end of the composite hospital building, and going down the line, one encounters in order (a) single rooms for private patients; (b) interchangeable one or two-bed rooms; (c) 2, 3, or 4-bed wards (divisible, if desired, into individual cubicles); (d) 6, 8, 10, 12, or 16-bed wards with attached quiet rooms. A hospital planned in this manner is in a position to adjust itself readily to fluctuations in the social-economic condition of the people or, shall we say, to its own imperious financial necessities, for a hospital may desire to devote 50 per cent of its beds to the poor, but may be compelled by its own poverty temporarily to reduce the volume of its free service. Such a hospital is happily in a position to offer appropriate accommodations to any possible combination of free, part-paying and full-paying patients. This method of planning can hardly be said to be new, but it has perhaps been followed more purposefully and definitely during the past year than in previous years.

Architectural Competition Promises Much

While the practical results of a recently announced architectural competition lie in the future, it seems appropriate to mention here the competition which is being held by THE MODERN HOSPITAL, for a small general hospital having a capacity of not less than thirty or more than forty beds. The purpose of this competition is "(a) to stimulate the building of small hospitals that are efficiently arranged, suitable for smaller communities, as well as architecturally creditable, (b) to bring to the trustees of small hospitals floor plans that shall combine simplicity of design and good taste with a compact arrangement of the various departments of the hospital now regarded as essential to the efficient scientific care and treatment of the sick." Thirty of the more meritorious designs resulting from this competition probably will be selected for publication in book form, and for the three best designs substantial money prizes are offered. The competition promises much for the future of small hospitals in America.

Current Tendencies in Design

At the annual convention of the American Hospital Association in September, a rather long summary of outstanding facts and tendencies in current hospital planning and construction was presented by the present writer on behalf of the committee on building—construction, equipment, and maintenance. Those who are making a serious study of current hospital construction are invited to consult the original report, which appeared in the October issue of THE MODERN HOSPITAL. I venture to repeat here in abbreviated form, as pertinent to this review, some of the sections of that report:

Among the standards, practices and tendencies observed in current hospital planning are the following:

A growing disposition to inquire into the needs of a community before making plans, thus avoiding wasteful duplication and overlapping.

A marked tendency toward concentration in planning, the object of which is to economize in the use of building materials, and to facilitate medical, administrative, nursing, and domestic service.

The development of general plans through the putting together of the plans of individual departments, each conceived from the standpoint of precise needs; in other words, scientific, synthetic, technical planning rather than the adoption of loosely conceived general schemes, dominated by conceptions of architectural design.

A widespread demand for convenient facilities for outdoor treatment.

A demand for a reasonable measure of privacy for patients occupying semi-private and ward beds.

A more liberal use of plumbing fixtures.

Efforts to obtain central and accessible locations for diagnostic laboratories and for treatment rooms of every description.

The reconsideration of the whole question of centralized versus decentralized nursing service.

A feeling that serious efforts should be made toward the standardization of fixed equipment.

Insistence on fireproof construction, with or without legal compulsion.

The disappearance of wood floor, and a lack of unanimity concerning the most satisfactory substitute for it.

The occasional substitution of solid plaster for hollow tile in the construction of interior partitions.

Decided preference for metal interior trim.

An increasing demand for built-in features and specialties.

The use of a great variety of mechanical and electrical devices, such as call systems, telephone connections, the telautograph, radio connections, etc.

Emphasis on the direct ventilation of ward and patients' rooms, with the selective use of mechanical ventilation (especially exhaust ducts and fan equipment) for the ventilation of operating rooms, out-patient rooms, lecture rooms, kitchens, laundries, sink rooms and closets, toilets and baths, laboratories, autopsy rooms, and animal rooms.

The widespread use of tiled wainscots for service rooms of all kinds.

The use of the tile wall finish in receiving wards and, to some extent, in children's wards.

Insistence on the screening of all hospital buildings.

A recognition of the danger inherent in the use of x-rays, and the redoubling of preventive measures, such as the protection of wires and the special treatment of floors, walls and ceilings.

"To make an art of life. That is the finest art of all the Fine Arts."—Florence Nightingale.

THE AMERICAN HOSPITAL ASSOCIATION IN 1922

By A. R. WARNER, Executive Secretary, American Hospital Association, Chicago, Ill.

THE progress made by the American Hospital Association each year now seems to be cumulative. Progress one year appears to beget progress the next: no labor appears to be lost nor does its power wane. Each year the association moves with less effort and ever farther toward its object, the organization of the American and Canadian hospitals and hospital people into an active, orderly group, working together with their full power for the development of this field for service. Every activity of the association grew in the past year, but only a few can be mentioned here.

Annual Conference Breaks Records

The 1922 conference registered nearly twice the number of personal members and institutional delegates of any previous year. The total number of registrations of all organizations in the conference, including guests, was well over 3,000.

The exposition was about twice the size of any previous year, but many times as good. Stronger firms participated, exhibits were presented in a more instructive manner, and a wider range of articles was shown. The greater number of noncommercial, purely educational exhibits also helped.

This year for the first time the trustees of the association assumed definite responsibility to insure to all at the conference and to institutional members throughout the year satisfactory dealings with exhibitors. This policy will be continued. The association will protect itself by exercising due care in the assigning of space.

The program was especially strong in two points: first, there was a larger number of committee reports, representing hard work and much study; second, there was time for more discussion of the important parts of the reports and papers —important because they were crystallizing and formulating the thought and policies of the hospital field.

The addition of the American Occupational Therapy Association to the group brought marked progress in the development of the annual conference toward a real group conference of all elements of the hospital field.

Production of Valuable Reports

A carefully worked out and written committee report means distinct progress to the hospital field. Eighty per cent of hospitals as yet have less than 100 beds, and half the hospitals of the United States and Canada are less than twenty years old. To these hospitals a committee report, definite in its statements, authoritative, setting forth a consensus of opinion of the best informed and most experienced of the field, discussed and approved by the association so that it represents a generally endorsed policy, if not a standard, brings a forward step. It is valuable and practical information. It provides a basis of comparison. One more of their policies becomes as good as those of the strong, leading and older institutions wherein the worth of the policy was established by years of experience. One function of the association is to increase the number and extend the scope of such committee reports, then give to them wide and persistent publicity.

In the past year, the association produced twice the number of such reports of any previous year. Results from reports, discussions and publicity thereof are never immediately apparent. But when one sees a simple recommendation as to a single policy made in a committee report to the association come into almost universal use within five years the certain value of all these carefully prepared and approved reports becomes evident.

The publicity service of the association was markedly extended. During the year the home office used 30,000 letterheads, nearly double that of the previous year, and 57,000 bulletins and pamphlets were distributed, an average of ten for every hospital worthy of the name in the United States and Canada. A part of these were sent to presidents and trustees, reaching the hospital indirectly. The active interest and appreciation of the trustees was such that this service will be further extended next year.

Institutional Membership Reaches 500

The growth of institutional membership to 500 now assures ultimate success in the development as an association primarily composed of and controlled by the hospitals themselves. The possibilities of such an association becoming the melting pot and the organization through which all will contribute to common welfare and to the progress of individual institutions became better understood during the past year, especially by hospital trustees. Institutional membership has come to be generally interpreted as an evidence of progressiveness and tendency to broader policies and activity, in contrast to a policy of isolation. One hospital learned this rather unpleasantly

NEW EXECUTIVE OFFICERS OF THE AMERICAN HOSPITAL ASSOCIATION

President, Asa S. Bacon, Presbyterian Hospital, Chicago (center); president-elect, Dr. M. T. MacEachern, Vancouver General Hospital, Vancouver, B. C. (uper left); first vice-president, Dr. A. K. Haywood, Montreal General Hospital, Montreal, Quebec (upper right); second vice-president, Miss Charlotte Aiken, The Trained Nurse and Hospital Review, Detroit (lower left); third vice-president, Dr. R. G. Brodrick, Alameda County Hospital, San Leandro, Cal. (lower right); and executive secretary, Dr. A. R. Warner, Chicago (lower center).

when a prospective intern gave this as one of his reasons for declining its appointment.

With the recognition that the association under the new organization is beginning to accomplish distinctly more for common interests, there has come the feeling that it is no longer quite dignified for a hospital (without good reason) not to be a part of the organization. It has seemed better to be a part of the producing group rather than to be among those who received the benefits of the work and expenditures of others without contributing anything thereto.

Personal membership during the year has passed the 1,500 mark. The significance of this growth is in the fact that the old personal members of the association and the new personnel of the field are willing and ready to become organized through an association, of which the ultimate control lies in the boards of trustees of the institutional members, and are willing to work in it for the common welfare and progress of the field.

HOSPITAL ADMINISTRATION DURING 1922

By A. C. BACHMEYER, M.D., Superintendent, Cincinnati General Hospital, Cincinnati, Ohio.

A BRIEF review of events during the past year shows that the outlook in hospital administration is very promising. The "disorder" and "inefficiency in management" that has so often been complained about in hospitals and kindred institutions, because of the method of conducting affairs by "rule of thumb" and without regard for business efficiency, are quite rapidly passing away. Careful and systematic study of methods of administration is being made. As a result of such studies of the various phases of hospital management, sound and efficient policies and principles of action are being formulated.

The year 1922 has witnessed a healthy development in this direction. The reports of various committee of national organizations are one proof of this contention, but the growing popularity of our institutions, as evidenced by the increasing use made of them by the public, is probably the best proof that their efficiency is steadily increasing. The hospital administrator is often confronted by difficult and arduous tasks in adjusting and solving routine and frequently petty problems of management, but those same problems assume far greater proportions and are more wasteful of energy and time-consuming, if no definite policies have been adopted or if no sound principles of administration have been established to serve as a basis for reasoning or action.

Report on Training of Executives

One of the outstanding events of the year was the splendid and comprehensive report of the committee engaged in the study of the training of hospital executives. The study made was an exhaustive and careful one and the report presents not only an excellent basis for the establishment of training courses, but also gives the hospital superintendent a wider perspective of service. While not ignoring the functions of the executive inside the confines of the hospital, the report emphasizes the fact that the administrator must, in the future, assume a very prominent position in the community so as to correlate the hospital with all other agencies having to do with any program pertaining to the public health. The outline of subjects to be covered in a course of training, while only suggestive, is very comprehensive and should serve present executives as a guide for their own reading and study. It is the present hope that during 1923, one of our universities will inaugurate a real course of training, as suggested by the report.

Report on Nursing Education

Another prominent event of the year of great interest to all hospital executives was the report of the committee engaged in the study of nursing education. This report in a very excellent manner covered the entire field of nursing and contained a number of excellent suggestions and recommendations. It emphasized the fact that the training school is an educational entity and should be considered as such and not regarded as one of the service departments of the hospital. While recommending a somewhat shorter period of training, it calls for more intensive education and definite courses of instruction; more instruction and less practice. Recognizing that this means increased cost of nursing to the hospital the committee recommends the "provision of endowment specifically devoted to the purposes of education." It recommends a basic nursing course for all nurses, to be supplemented by post-graduate courses for those doing specialized work.

This report is of great importance, not only because it outlines definite policies relative to nursing education, but because of the effect which the adoption of those policies will have upon hospital administration.

While the annual hospital convention is always of great interest to all wide-awake hospital administrators, the 1922 convention was of particular interest and benefit. Here again, it was probably the committee reports and exhibits that were of greatest service, though the magnificent commercial exhibit can hardly be assigned a second place. It afforded an excellent opportunity for advancement in knowledge of the details of hospital equipment and supplies and there were few who did not take advantage of the opportunity.

The various committees reporting and at work on the convention floor all made definite and valuable contributions toward increasing the efficiency of hospital management. These committees will no doubt continue to be a feature of future conventions and their work serve as the basis of valuable bulletins of information from the secretary's office. During the last few years, the association has progressively increased its service and consequently its value to its members and the outlook for progressive growth and development is very promising.

Liability of the Hospital

During the first months of the year, the hospitals of Ohio were alarmed when the supreme court of the state upheld a verdict against a public charitable hospital for damages caused by an incompetent nurse. This verdict has since been the basis of a number of papers calling attention to the hospital's responsibility. The decision again emphasized the fact that administrators should be familiar with all laws which in any way relate to the operation of hospitals.

Our institutions are responsible ones and while they should not be held liable for unavoidable accidents, it should be our constant endeavor to establish confidence in them in the minds of the public. Patients entering our institutions have the right to believe that their interests will be protected and that they will receive the best care and attention that modern medicine and hospital methods can afford. It is essential therefore that every effort be made to select competent and careful physicians, nurses and employes and that each member of the personnel be acquainted with his or her responsibilities. Every practical means of safeguarding patients, visitors and employes against all manner of accidents should be employed. It would also seem to be the part of wisdom to carry adequate insurance of the various kinds, (fire, accident, liability, etc.), but not at unusual or exorbitant premium rates. The liability of a properly operated institution is not very great, but on the other hand, an institution which does not enjoy a good reputation, has need to concern itself with its liability. Each time a hospital is found liable for damages, other hospitals will be subjected to similar claims and the annoyance of legal proceedings even though the hospital may escape unfavorable verdicts. This would seem to be a good argument for stronger associations, greater efficiency and closer governmental supervision.

Operating Costs Still High

Following the excessive costs of labor and material that were experienced during 1921, particularly during the first half of that year, there was gradual decline in prices and it was hoped that the high per capita costs of the last few years were soon to become history. Prices continued to decline during the early months of 1922, but shortly after midyear, an upward tendency was noticed and this tendency became more pronounced as the year approached its end.

Many excuses were offered by merchants. The new tariff was blamed for increased cost of instruments and drugs, labor conditions for other items, the weather and freight rates for others. Whatever the cause may be, the fact remains that while commodity costs have not yet reached the high 1921 level, they are higher than early in the year, hospital budgets are feeling the effect and the outlook discloses no immediate relief.

Urges Greater Teamwork

No new methods of financial support were developed during the year. All old and time-tried methods were used with varying success. In those communities, where the "Community Chest" has become an established fact, the hospitals seem to favor that method of support. There were but few instances of failure of "chest drives" and there were a number of instances where the method was given its first trial, since the war, with very promising results.

The year 1922, like its recent predecessors, demonstrated the need of team work in the hospital. The individual, be he trustee, executive, staff member, department head, nurse or employe, who has not grasped the true meaning of cooperation, who has not learned to "work with" his fellows, will find his usefulness short-lived and his value to the institution very limited. In the same way the hospital that is constantly competing with the other institutions in its vicinity, instead of working with them, will soon find itself isolated and its popularity declining.

With the advent of a new year, let us endeavor to develop more team work in our individual hospitals and also among the institutions of our city, our state and our country.

HOSPITAL DEVELOPMENT IN CHINA IN 1922

By ROGER S. GREENE, China Medical Board, The Rockefeller Foundation, New York, N. Y.

THE most significant event in the hospital world in China during the year 1922 has been the opening of the Chinese Red Cross General Hospital at Shanghai under the management of a group of Chinese physicians and surgeons with unusual qualifications for the work.

Hitherto the Chinese private practitioners of Shanghai, the most progressive city of China, have not had access to any up-to-date hospital and they have consequently been obliged to treat both their medical and surgical cases either in the homes of the patients or in very inadequately equipped nursing homes. A few men have had junior appointments in hospitals under foreign control, but those institutions were not well adapted to meet the requirements of private practice. In other parts of the country the situation has for the most part been even worse, except in Peking where modern medical practice is less generally accepted and the need for hospital facilities has therefore been less urgently felt. The excellent facilities of the Chinese Central Hospital at Peking have not therefore been fully utilized.

Red Cross General Hospital, Shanghai, the opening of which is called the most significant event of the past year in the China hospital world.

Red Cross Hospital Has 70 Beds

The buildings which are occupied by the new hospital at Shanghai were erected some fifteen years ago by the Chinese Red Cross Society, but during most of this time the hospital has been controlled by foreign organizations under a lease from the society. The design of the buildings is not by any means ideal from the standpoint of hospital administration, but it has been found possible to adapt them quite successfully for use as private and public wards. The total capacity is seventy beds, of which about one-third are in private or semi-private wards, while the remainder are used mainly for charity cases or for patients who are able to pay little more than the cost of their food. Regular European or American ward equipment is used; there are a well-equipped operating room and a clinical laboratory; a small x-ray plant is being installed. The main building is heated by hot water, and electricity, water and gas are supplied throughout the hospital.

At present the hospital is managed exclusively by the visiting staff, the Red Cross Society merely contributing annually a sum of $10,000 silver (about $6,000 United States currency) towards the maintenance expenses. At the beginning this plan of organization, which would not be regarded here as the most satisfactory, seemed to be the only feasible one. In time, means will doubtless be found for relieving the staff of all responsibilities not of a professional nature. The budget for the first year comes to $50,000 silver (about $30,000 United States currency), and there is every reason to believe that the progressive Chinese community of Shanghai will provide such additional sums as the natural development of the hospital may require.

The leading members of the staff are Dr. Wayling New and Dr. Way-sung New, brothers, the former of whom, a general surgeon, had his medical education in Great Britain and spent several years in hospital service there after graduation. His brother is a graduate of the Harvard Medi-

cal School, who spent six years in institutional work in the United States and China, including an orthopedic service at the Massachusetts General Hospital, before beginning private practice. The physician-in-chief, Dr. E. S. Tyau, also has had a thorough training, particularly in pathol-

Public ward building of Red Cross General Hospital, Shanghai

ogy. Among the other members of the visiting staff are two Chinese women, graduates of Michigan and Toronto, who have built up very successful practices in their own country. There are two residents, one of whom, a graduate of Rush Medical College, had special training in pathology at Chicago. The superintendent of nurses is a Chinese graduate of Johns Hopkins Hospital who has also had considerable practical experience in China.

The growing appreciation of the value of thorough training in institutional work, which is illustrated by the records of the staff of this hospital, and the fact that Chinese men and women so thoroughly seasoned are beginning to be available, are among the most encouraging features of the medical situation in China, and justify the belief that the time will soon come when the Chinese people themselves will be able to take the lead in medical work in their own country. At present, however, the number of qualified practitioners and teachers is very small, and outside of a few large cities there is too little appreciation on the part of the general public of what scientific medicine really means, and what the modern physician and surgeon must have in the way of equipment and financial support if they are to make effective use of their long and laborious training. There is still ample room, therefore, for useful work by foreign agencies, both in the teaching of medical students and in treatment of the sick.

Mission Hospital Work is Extensive

The best medical work that is being done today in China on a large scale is still that which is carried on by the foreign mission hospitals, some 250 in number, which are scattered through all the original eighteen provinces and Manchuria as well. These hospitals are of all conceivable varieties, according to the professional and administrative ability of the physician in charge and the degree of support obtainable from the local community or from the mission constituency abroad. Some of the medical work is carried on in small buildings of a type very little different from the homes of the patients, with no modern sanitary conveniences, with the most meagre equipment and with no trained nurses. Such institutions can at best be regarded only as dispensaries with lodgings attached in which patients from a distance can be housed while they are under treatment. At the other extreme are modern fireproof buildings with modern mechanical installations and fairly adequate equipment, staffed by thoroughly live doctors and nurses.

The quality of the work done in some of these hospitals probably would compare favorably with that in the average small hospital in this country. The mission hospital has one great advantage over the ordinary small hospital here in that the attending staff members give practically their whole time to it and usually live so near by that they can respond to calls at any hour of the day or night as promptly as if they were actually living in the institution. This constant concentration of effort brings in some cases much greater results than one would think possible considering the slender financial resources at the command of the superintendent.

Devise Standard X-ray Outfit

During the past ten years there has been a very striking improvement in the character of the work done. Members of the staff have devoted

Dispensary building and morgue of Nanking University Hospital

more attention to graduate study during their furloughs. More recognition has been given to nursing, which scarcely existed twenty years ago. New buildings have been erected. More atten-

tion has been paid to proper equipment of wards as well as operating rooms, and far more attention has been given to careful study of cases by laboratory methods. Records, while still inadequate in most places, are improving, and the whole problem of hospital administration is being systematically studied by the recently organized council on hospital administration of the China Medical Missionary Association. This council is subdivided into committees on hospital construction, hospital management, records and statistics, training of technicians, and x-ray.

St. James Hospital at Anking, China

Among the most active of these sub-committees is that on x-ray. The installation and operation of a modern x-ray plant presents special difficulties in most cities of China. In many places there is no electric light and power service; where electric current is available it may be furnished only at night; the current is sometimes direct and sometimes alternating, and there are all possible variations in the nominal voltage. The actual voltage supplied by a single plant varies from moment to moment with the load on the whole system. The combination of excessive heat and humidity in some regions, and the lack of ice or other means of refrigeration introduce other special problems. On top of all this there is the lack of experts, except at one or two places, who are at all qualified to install the aparatus, to make necessary adjustments to meet local conditions and to carry out repairs when required. Dr. P. C. Hodges, roentgenologist of the Peking Union Medical College, and secretary of the x-ray committee, has devised a standard outfit to meet the varying conditions of current and climate, and has aided in installing the apparatus. He has also conducted summer courses in roentgenology planned to meet the needs of the isolated doctor who will have to operate his own plant.

The principal event in the mission hospital world in China during the year 1922 was the opening of the new building of the Soochow Hospital of the Southern Methodist Board. This is a thoroughly modern fireproof structure of brick and reinforced concrete, accommodating about sixty-five patients and costing about $250,000 silver, which is equivalent to about $153,000 United States currency, this sum including some new equipment. Of the total amount some $77,000 silver was contributed or earned locally, a striking evidence of the place which the hospital has made for itself in the esteem of the Chinese community which it has been serving for forty years. The full-time staff includes three American doctors and two Chinese doctors with American training; four American nurses act as supervisors, the actual nursing being done by Chinese locally trained.

An interesting feature of this institution is an inn under the management of the hospital for the accommodation of cases which would ordinarily be given out-patient treatment, but must be received in the institution as they come from too great a distance to go back and forth to the dispensary. By this means the expensive hospital space can be reserved for the really serious cases. Soochow is one of the most important cities in the lower Yangtze valley region, which is in many respects the most progressive part of China, and this hospital is therefore likely to be a powerful influence for good.

Another similarly modern hospital to cost $180,000, including equipment and staff quarters, is now under construction at the port of Wuhu, further up the Yangtze valley, under the auspices of the Northern Methodist Board.

The establishment of these institutions marks a tendency which is becoming stronger every year in favor of concentrating available human and material resources in relatively few institutions, and to emphasize quality rather than quantity of work done. By adhering to this policy foreign organizations can greatly enhance the significance of their work, as they are thus enabled to give far more convincing demonstrations of the practical value of scientific medicine than they could by the older extensive methods. Furthermore, in these carefully organized and well-equipped hospitals, the staff is performing an important educational function in training nurses and in giving to young Chinese doctors an opportunity for securing under good conditions the practical experience which they need in order to continue the professional development begun in the medical schools.

Peking Hospital Grinds Own Lenses

Some mission hospitals have developed interesting special features as in the case of the Methodist Hospital at Peking which has a large eye clinic, with its own lens-grinding shop and a new but very promising dental department in which some teaching is being done.

Naturally the best organized of the foreign hospitals are those connected with the medical schools. Special mention may be made of the Shantung Christian University Hospital at Tsinan, the capital of the province which has been the subject of so much international controversy. This is an attractive 100-bed hospital devoted entirely to the teaching of medical students and receiving both men and women patients. It is controlled by a union of eight British and American societies. St. Luke's Hospital of the American Episcopal Mission in Shanghai is affiliated with St. John's university as a teaching hospital, but its public wards are open only to men. It differs from other mission hospitals in having a large accident service which is due to the fact that Shanghai has become a great industrial center with modern factories and modern traffic conditions in its streets.

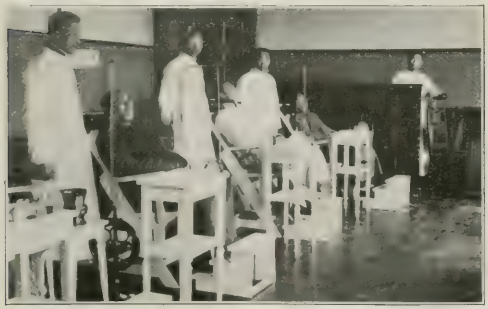
Well-kept Records at Changsha Hospital

One of the most notable hospitals in China is that of the Hunan-Yale College of Medicine at Changsha. The hospital has accommodations for some 120 patients. The building is of brick and reinforced concrete, carefully planned, with modern equipment, and ranks among the best in China. The medical school teaches in English, and this greatly facilitates the keeping of good records as the interns are trained to keep careful histories. A recent visitor to China who was well qualified to speak on this subject, expressed the opinion that the ordinary histories were better kept at Changsha than in any other hospital he had seen in China. The medical school and hospital are the result of cooperation between Chinese and Americans, and the provincial government has undertaken to give an annual subsidy of $50,000 silver for the maintenance of the combined institution. A joint enterprise of this character possesses a unique opportunity for wide influence at this stage of China's development, especially since its faculty includes several Chinese of high character and attainments.

Unfortunately most of the purely Chinese medical schools do not as yet possess hospitals which can be compared in efficiency with the Chinese private hospitals at Peking and Shanghai which have been mentioned, or with the mission hospitals. An excellent hospital is, however, maintained by the Japanese South Manchuria Railway in connection with its medical school at Mukden, both being semi-governmental institutions.

Peking Union Hospital Situated Best

The hospital of the Peking Union Medical College is probably more fortunately situated than



Dental clinic of six chairs at Methodist Hospital, Peking. This mission hospital, as another special feature, has a large eye clinic and its own lens-grinding shop.

Children's pavilion at Hunan-Yale Hospital, Changsha, which is a joint American and Chinese enterprise. The hospital is known for its excellent history-keeping.

any other, both as regards staff and physical equipment. This hospital completed last summer its first year of operation in its new plant, which has a total capacity of 250 beds. It is hoped to make this institution equal in efficiency to the best hospitals of similar size in any part of the world, an undertaking of considerable difficulty in a place so far removed from the main sources of supply for men and materials. Great assistance was rendered in the organization of the work in the new buildings by Dr. R. B. Seem of the University of Chicago, formerly assistant superintendent of the Johns Hopkins Hospital, who spent a year and a half in Peking as superintendent of the college hospital. A nurses' training school of a high standard has been established and is beginning to attract a higher grade of pupils than had previously been available in other training schools. The members of the staff are all on a full-time basis and include a number of Chinese physicians and surgeons who were educated abroad. This hospital is now recognized by the council on medical education and hospitals of the American Medical Association.

Surgical ward of the Peking Union Medical College Hospital

A determined effort is being made in China to maintain an intimate relationship between the medical school and the outlying hospital. At the Peking Union Medical College, which formally opened its new plant in 1921, special attention is being given to graduate teaching, and fellowships have been provided which make it possible for practically any doctor engaged in institutional work to go to Peking for study without expense to himself. The facilities offered are of various kinds. Qualified students may be admitted to regular undergraduate courses when they need to review such fundamental work, or they may enroll in short intensive courses planned primarily for graduates. Of even greater value are the opportunities for service as voluntary assistants in the clinics and laboratories. Even house appointments as assistant residents are frequently available.

On the other hand scientific workers in the school frequently receive assistance from the outlying hospitals in the study of peculiar local problems and in the collection of specimens for use in teaching and research. The development of this type of cooperation systematically throughout the country has great possibilities for good, as it tends to produce a very desirable unity for all medical forces for an effective campaign against disease.

Exterior of Hunan-Yale Hospital, Changsha, which accommodates 120 patients

Visiting professors from abroad are playing an

important part in this work. Among those who have shared in the teaching at Peking for short periods during the past two years are: Dr. A. B. Macallum of McGill University, Dr. Francis W. Peabody and Dr. E. G. Brackett of Harvard University, Dr. Donald D. Van Slyke of the Rockefeller Institute, Dr. E. C. Dudley of Chicago, Dr. Harry R. Slack of Johns Hopkins University, and Dr. Ernst Fuchs of Vienna.

Dr. E. G. Brackett of Boston, with graduate and undergraduate students attending his course in orthopedic surgery at Peking Union Medical College.

The hospital workers of China are coming to be very much alive to the importance of preventive medicine. It is perhaps a natural result of the extreme shortage of properly trained doctors that attention is directed to the superiority of prevention over cure, for a man who already has more patients than he can well look after is naturally attracted by the thought that with the cooperation of the community he may be able to prevent thousands of cases of disease by the expenditure of time and effort that would suffice to bring relief to only a few tens or hundreds after they were actually ill.

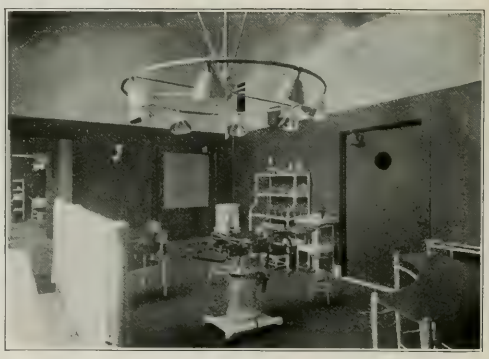
The hospital is therefore coming to be a center for effort in public health. At first the appeal for help usually comes to the doctor only in time of some epidemic that is sufficiently menacing to arouse the community from its usual indifference. Years of faithful routine work in the hospital have given the people and their officials confidence in the physician and they therefore naturally turn to him. Epidemics of cholera, plague, smallpox and typhus have been sufficiently frequent to give striking demonstration of the value of the procedures developed by modern science for dealing with these diseases, but it is an interesting fact that in those communities in which the confidence of the people had not been previously won by the therapeutic work of a hospital, it has been very difficult to secure popular approval for the necessary preventive measures in time of emergency.

The public service rendered by the mission hospital in time of civil war in caring for wounded soldiers and non-combatants has also done much to add to the prestige of western medicine and to win local service of the Chinese army has not yet been properly organized, consequently after an engagement most of the serious cases are cared for by private agencies, both foreign and Chinese.

Independent Chinese Effort Increases

As a result of services of these kinds some mission hospitals are receiving considerable annual subsidies from provincial authorities or from the government railways, in addition to generous contributions from the Chinese public. During the fighting last spring near Peking the demonstration of a portable x-ray outfit by surgical units from the Peking Union Medical College led two army commanders to contribute funds to two mission hospitals for the purchase of similar equipment.

Main kitchen, Peking Union Medical College



One of the four main operating rooms, Peking Union Medical College

No account of medical work in China would be complete without reference to the North Manchurian Plague Prevention Service under the direction of Dr. Wu Lien-teh, a graduate of Cambridge, England. While this service was organized primarily to guard against plague which appears to be endemic in regions adjacent to Manchuria, it conducts in ordinary times a series of hospitals at Harbin and other places in Manchuria, rendering a very useful service in that frontier country. Dr. Wu was also responsible for the promotion of the Central Hospital in Peking and for carrying through the work of its construction and initial organization.

It is on such independent Chinese effort that the development of hospitals in China must largely depend hereafter, and those who have had an opportunity to observe the skill, devotion and public spirit of many of the new generation of Chinese doctors have high hopes for their future.

ROCHESTER ORGANIZATION PROMOTES HEALTH CONSULTATION PLAN

The Tuberculosis and Public Health Association of Rochester, N. Y., in cooperation with the health bureau of that city, plans to provide health consultations as soon as the work can be organized, it announces. A campaign of publicity and education of the public to the value and necessity of yearly physical examinations will be undertaken.

These examinations will be conducted preferably in school buildings and possibly in the out-patient departments of the general hospitals. A fee of one dollar will be charged for the examinations, the charge being sufficiently low so to enable practically anyone to obtain them. The examination will include laboratory tests and x-ray examinations where definite indications for them exist, according to the announcement. The person examined will be provided with such information in pamphlet form as will be the value in his particular case.

Where corrective measures are indicated, the person examined is to be referred to his family physician, with a report covering completely the findings in his case. The complete examination will be conducted by one physician, whose work will be augmented and supported, if possible, by the establishment of a staff of consultant specialists.

No treatment nor advice regarding treatment will be undertaken, this being regarded as the province of the family physician and the specialist. Both practitioners and specialists are expected to support this work enthusiastically, as there is no question but that great numbers of persons who had considered themselves in perfect health will be found with remedial and corrective defects from which they should be referred to one or the other for treatment.

The establishment of these health consultations by a private organization, with the approval and encouragement of the city health organization, may presage the establishment later of diagnostic clinics under the direction of the health bureau. Difficulties are at once encountered when such pioneer work is attempted through legislative channels, with the necessity of asking for appropriations. The plan will therefore be tested in a private, or rather semi-public, way first. If it meets with public approval, it may then be taken over as a public health function, as a measure of preventive medicine.

Such a plan is expected to meet studied opposition from certain quarters, at least at first, so that its crucial test will be the ability of this health consultation organization to survive such opposition.

The program outlined suggests the strikingly successful private effort in this same field of the Life Extension Institute. The plan of operation is about the same.

There will be those who will desire to compare the health consultation plan with the health center bills introduced into the New York State legislature two and three years ago. The plan proposed in that legislation was worked out under the supervision of the state commissioner of health, Dr. Herman M. Biggs, but met very strong opposition from county and state medical societies.

The plan proposed by the Tuberculosis and Public Health Association of Rochester will have strong financial backing, which will guarantee it against failure through insufficient funds to carry it through.

William A. Sawyer, M.D., heads the committee organizing this work. Dr. Sawyer is medical director of the Eastman Kodak Company, and also secretary-treasurer of the American Association of Industrial Physicians and Surgeons.

It is expected that the new municipal hospital will be able to cooperate in the work of the health consultation organization through providing beds when observation for a period in a hospital is necessary to complete the diagnosis.

FEW SMALL HOSPITALS IN SCOTLAND

In Scotland the six hospitals attached to medical schools, three of which are located in Glasgow, treat more than half of the hospital patients in that country. This statement was made by Sir Napier Burnett, chief of the hospital division of the British Red Cross and Order of St. John, in a recent address in opening the small Insch and District War Memorial Cottage Hospital.

Sir Napier also said that, while the population of Scotland has increased 2.9 per cent in the past ten years, the number of patients admitted to the Edinburgh Royal Infirmary has increased by more than nine per cent. Ninety per cent of the hospital beds in large city hospitals are occupied daily, while only 60 per cent are occupied in cottage hospitals. This indicates, he declared, that the county people use the city hospitals instead of their own.

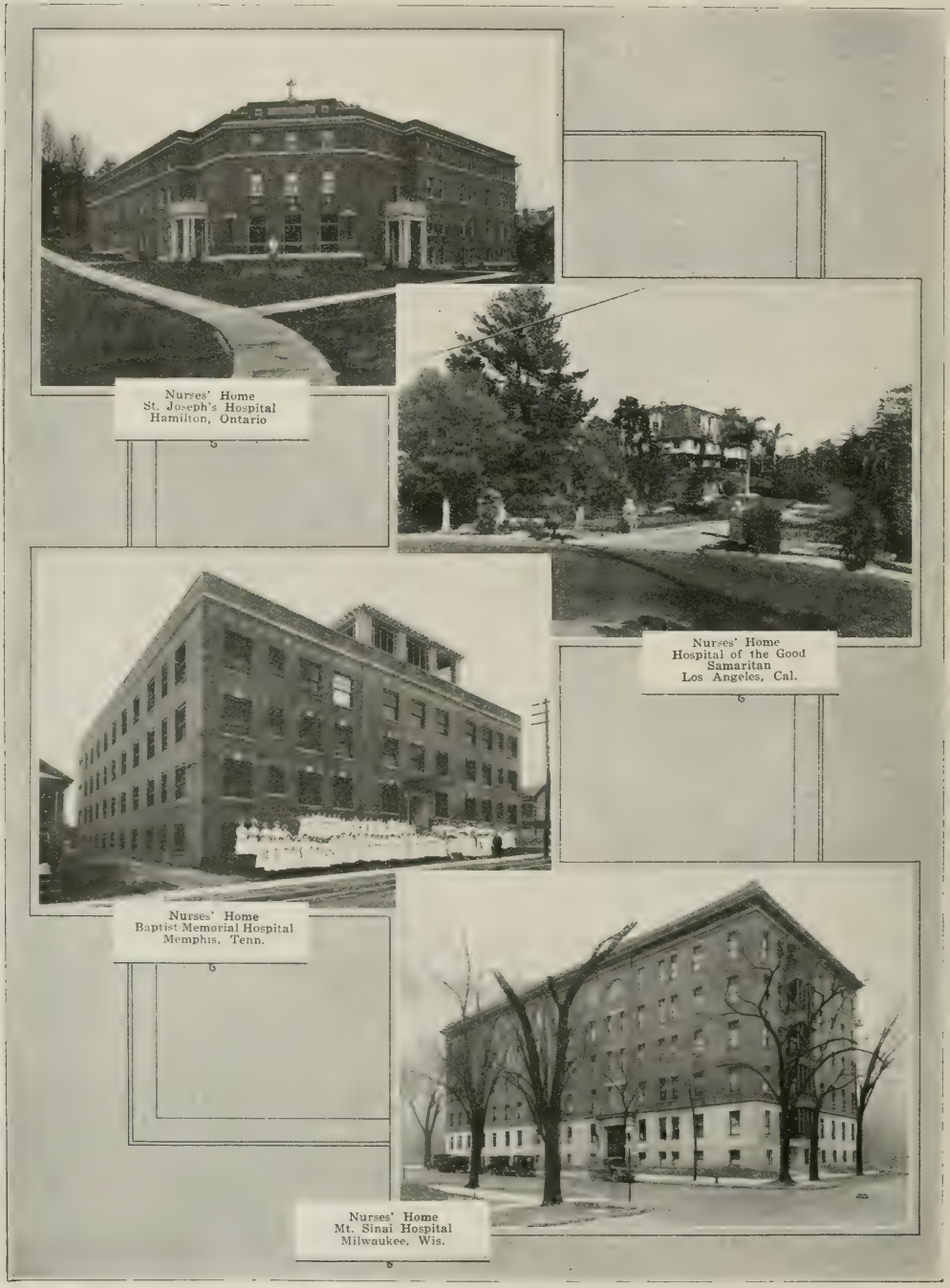
The hospital leader urged that county hospitals in Scotland be more economically used and that the services of the infirmary staff should be available for patients in the hospital beds near their own homes. It lies within the field of the medical profession, he believes, to evolve a model coordinated hospital service for city and county.

Success, as well as failure, has its sharp thorns.

It is a trait of human nature, common to all, to develop the great "I AM" idea as progress is made in a given field—but it is well to bear in mind that success may become its own hindrance through too much self-glorification.

Faith in your own powers and confidence in your individual methods are essential to success but an attentive ear is the open door to knowledge—and no man is a graduate of the school of experience.

FOUR OF THE MANY NURSES RESIDENCES OPENED DURING 1922



Nurses' Home
St. Joseph's Hospital
Hamilton, Ontario

Nurses' Home
Hospital of the Good
Samaritan
Los Angeles, Cal.

Nurses' Home
Baptist Memorial Hospital
Memphis, Tenn.

Nurses' Home
Mt. Sinai Hospital
Milwaukee, Wis.

OUTSTANDING ACTIVITIES AND DEVELOPMENTS IN THE NURSING FIELD

By LAURA R. LOGAN, President of the National League of Nursing Education, Cincinnati, Ohio.

IN ATTEMPTING a review of outstanding events in the field of nursing for the year 1922 there comes to mind first of all the completion and publication of the report of the Committee for the Study of Nursing Education which was financed by the Rockefeller Foundation.

This work constitutes a most important event in nursing history. It marks an era of progress in the profession of nursing comparable with a like event in the progress of the profession of medicine for which a similar study was made under the support of the Carnegie Foundation more than a decade ago. Already this report with its conclusions has been reviewed by such authorities in nursing education as Miss Amy M. Hilliard and Dr. Richard Olding Beard. One finds little to add to these reviews at least until the laboratory findings and detailed studies of this eminent committee of diagnosticians are available.

Report Sustains Nurses' Earlier Diagnosis

The publication of the report of Miss Goldmark, the secretary of the committee, is awaited with much eagerness since it contains the detailed studies upon which the conclusions of the committee were based. Detailed recommendations for bettering conditions are expected in the report. The much wider attention which has been focused on nursing education by the report of this authoritative committee should stimulate and bring about a greater cooperation of all (and this cooperation is particularly desirable on the part of the public) responsible for the preparation of the nurse, who is found by this committee so necessary a factor to the future progress of human health.

Miss Hilliard in her review reminds us that a similar diagnosis (if such the committee's report may be called) has been made by nursing leaders for some years back. She says, "Many of us are very much heartened to be assured that we have not been on the wrong track these last ten years and that the conclusions reached by this impartial high tribunal are the same as those reached by the most far-seeing members of our own profession." Perhaps it is because of the deep-rooted notion in the medical world that no diagnosis should come from the nurse, that so little attention has been paid to these voices crying in the wilderness. In 1916 in her paper, "A Sounder Economic Basis for Training Schools for Nurses," Miss Adelaide Nutting showed the main source of the trouble to be in the insecure economic status of the schools of nursing in the hospitals. And Dr. Beard points out that perhaps the greatest of the constructive values of this committee's report is to be found in its tenth conclusion. He says, "Nursing education cannot become all that the future of the nursing profession promises, all that the public service demands, without adequate financial support. It has been too long sustained by the grace of the hospital the pupil serves. The hospital has profited by the arrangement in too many instances, the schools have starved under it."

Various Experiments Being Tried

In the meantime without waiting for the report of this diagnostic study of nursing education by the committee, remedies have been and are being applied all over the country. It was inevitable that unsafe and ill-considered remedies would be applied; but the application of the varying remedies shows at least a sincere desire to go forward in the right direction. It is a little too soon to comment upon the soundness or unsoundness of all the remedies proposed. Such a judgment must in a measure at least await the acceptance of general theories of education upon which educators themselves are not in agreement.

A real glimpse into the soul of this reform movement can only be had by an examination into the hospital schools and nursing departments, and into the professional and personal ideals which are being fostered in the individual student. These will vary directly with the character and preparation of the heads selected for these schools. This is only another way of emphasizing the urgent need for the stimulation of the education of nurses as administrators, teachers and leaders.

Reports show that many more schools have instituted the eight hour day system during this year. It may be argued that if this demand for sufficient time for student nurses to study had come in a different form, the sound of the much needed reform might not have rung so discordantly in professional ears, ears which do not question the necessity for a nice balance between theory and practice in a university or professional school other than nursing.

Few attempts are recorded as yet this year to place the nursing schools of hospitals on a sound financial basis. Two schools report an increase

of $3,000 and over annually for purely educational uses. One has but to read the report of Miss Ada Belle McCleery of the sub-committee of the education committee of the National League of Nursing Education on the cost of nursing schools to see in what a chaotic and ill-defined state are the budgets of most schools of nursing. With the exception of the university schools, from no part of the country has appeared any satisfactory account of the separation of the budget of the school of nursing from that of the hospital. It may be that the first step in this direction is the proper monetary evaluation of the so-called laboratory work of the student nurse in the hospital and the giving of the student actual cash for her service, as is done in the shops where cooperative students from engineering colleges work, the student in turn to be charged for room, board, laundry and tuition. Perhaps this is the shortest road to nursing education reform. Perhaps hospital trustees will thus come to see the problem more rapidly and clearly. The plan of alternating periods of study with periods of practice, similar to that followed in the cooperative engineering courses, has stood severe tests for six years in the school of nursing and health of the University of Cincinnati.

One effective and wholesale reform is observable. I refer to the standardization brought about in hospitals and to its largest extent in 1922 by the American College of Surgeons. It should be emphasized that this does not mean as some have supposed that all hospitals maintaining training schools have by this particular seal been pronounced ideal or fit for the education of nurses. It does mean, however, that the student nurse working in any hospital which endeavors to live up to such standards cannot but be benefited.

Plans are this year going forward for the grading and standardization of schools of nursing throughout the country. These plans were projected by the education committee of the National League of Nursing Education in 1920 and halted until the Committee for the Study of Nursing Education should have completed its study and report. Undoubtedly this is the next necessary and great step forward in nursing education.

Centralized Training Schools Increase

There is unquestionably in our midst a strong movement toward centralization in nursing education. This is the natural outcome of experiments and expedients of the war period and marks a stage of development which has its counterpart in other professions. The growth of this movement will depend upon the rapidity with which any community may be awakened to its need of a well prepared nursing service as well as upon the resources which that community may command.

We witnessed last year a centralization go into effect in our oldest undergraduate university school of nursing in Minnesota. The nursing services of four of the leading hospitals in Minneapolis are now controlled for educational purposes by the University of Minnesota, and this year this university school of nursing boasts the largest registration of any school of nursing in America.

Two years ago in Cleveland a plan of centralization was projected which this year shows signs of rapidly going into effect. This plan provides for having all the classes in science and as many other classes as possible in the various hospital schools of nursing taught in a central place under the supervision of the university; and to have the work of such grade that the university shall recognize it by giving a definite amount of credit for it. The department of nursing education founded in the college for women in Western Reserve University represents the beginning of what Cleveland hopes will develop into a university school of nursing.

One outstanding activity of the year has been the experiment carried on in Philadelphia in centralizing the teaching of the preliminary courses in its schools of nursing. The movement was sponsored by the Philadelphia League of Nursing Education, the Hospital Association of Philadelphia, the Southeastern Council of Nursing Education, the Pennsylvania State Board of Nurse Examiners, the Pennsylvania Department of Health and the Philadelphia Department of Health. Rooms and equipment in the University of Pennsylvania were secured. The preliminary course was given as outlined by the National League of Nursing Education. The experiment opened in February of this year with sixty-six students and was considered so satisfactory that it is being continued for this fall's entering classes and for those of the coming spring with changes and additions, such as a budget of approximately $10,000 and a director. The committee in charge has definitely stated that it is in no way to be considered under the title of a university school of nursing, but that it is the centralized teaching of the preliminary course. In time the committee hopes to increase the educational standards of the student, the minimum standard is now one year of high school, and eventually to seek affiliation with the University of Pennsylvania. Twelve of Philadelphia's forty-five hospital training schools are participating. One hundred and twenty-six students are enrolled. The committee reports that a strong feature in the experiment is the lay interest which

is being aroused in the education of the nurse. The committee hopes to secure a large part of the funds necessary from the public. Ten dollars per student is being contributed by the hospitals. It is said by the heads of the schools of nursing participating that although it is found difficult to transport their students such long distances, they believe that the advantage of the better teaching is greater than this disadvantage of distance. Philadelphia gives as one of its strongest reasons for this experiment in centralization, the impossibility of its forty-five nursing schools all securing trained teachers.

Last fall Denver, Colo., sent out announcements of joint lectures for the students of the Denver schools of nursing for the senior, junior, and intermediate classes arranged for under the joint auspices of the Denver schools of nursing and the Denver League of Nursing Education.

Several Affiliations with Colleges

Several announcements of affiliations of nursing schools with colleges and universities have been made during this year. The City Hospital of Little Rock, Ark., reports that its school of nursing has affiliated with the University of Arkansas. The Samaritan Hospital School of Nursing of Troy, N. Y., has established an affiliation with the Russell Sage College of that city in a five-year course leading to the Bachelor of Science degree. The Columbia Hospital of Milwaukee has affiliated with Milwaukee Downer College. St. Agnes Hospital in Fond du Lac, Wis., has affiliated with Ripon College. Three schools of nursing at Grand Rapids, Mich., have arranged to have their preliminary sciences taught at the Grand Rapids Junior College. The Louisville City Hospital school of nursing is arranging connection with the University of Louisville.

The university schools of nursing in Minnesota and Cincinnati, because of their excellent facilities, have found it possible to offer courses for the advanced preparation of administrators and teachers of nursing.

The Leland Stanford Jr., and Washington University schools of nursing this year offered summer courses for graduate nurses which were well attended.

There is abundant evidence on every hand that hospitals maintaining schools of nursing are awakening to their educational obligations to the student nurse. Reports from schools in different states on accomplishments of this year read, "We have standardized and improved our nursing procedures"; again, "We are devoting more time to class and demonstration"; still another, "We have added four to six hours of class work in nearly every subject taught." Many report the addition of one or more full-time instructors.

That there is an increasing recognition of the need for training for every nurse in contagious diseases, mental and nervous diseases, and in tuberculosis is evident. An encouraging number of schools report affiliations arranged for their students in these long neglected services. One school writes, "We have completely overhauled our contagious department, have installed the Chapin technique and obtained an especially prepared supervisor."

Nurses' Homes Surpass College Dormitories

It is significant that this year records the building of a considerable number of new nurses' homes; many of them under the same roof as the classrooms and laboratories for the school of nursing. All or nearly all of these structures are carefully planned and equal, if they do not surpass, the most up-to-date college dormitories. So well equipped are these residences and so general is this reform that one writer is moved to wonder "what the effect three years of life in such luxurious surroundings will be on the future work and attitude of students." The writer adds a sound recommendation that the homes of the future be dignified and simple and that more emphasis be placed on establishing endowment funds for the educational work of the school. This housing reform for schools of nursing was so long in coming, however, and still appears so necessary in so many school dormitories that one cannot wonder or mourn that the pendulum has swung so far the other way.

The giving over of a whole building to educational purposes, as has been done at Mount Sinai Hospital, New York, is unquestionably a movement that will give the desired emphasis as well as suggest the means for adequate nursing education. With the nursing schools in universities, the holding of classes in buildings designed for educational work only is of course not a new feature. But just as medical schools find it advantageous to place their medical class rooms and laboratories in close proximity to the patient, so nursing schools will continue to want their nursing class rooms easy of access as a time-saving arrangement.

Besides improved ward and classroom teaching facilities, recreational and social additions are reported, such as gymnasium and swimming instruction, the appointment of social directors, etc., That the need for properly prepared instructors and supervisors of schools of nursing and for work in nursing departments is most urgent is shown by the constant demand for the same. In-

deed the gospel of reform in nursing education has spread and is spreading much more rapidly than the proper workers can be supplied to meet the needs of the field.

Another development of the year which cannot fail to leave its impress upon the preparation of the nurse was the appointment by the American Dietetic Association of a sub-committee of its education committee to cooperate with the education committee of the National League of Nursing Education in working out a more satisfactory outline for the teaching of dietetics to nurses.

Increase in Student Registration

From twenty-eight hospital schools in as many states comes the report of a decided increase, varying from twenty-five to fifty per cent in student registration for 1922. The state of Ohio reports through its nurse examining committee 87½ per cent of high school graduates in accredited schools of nursing.

Nursing schools continue to multiply. Ohio alone has added nine to its accredited list during the year and many states report new schools, either in connection with new hospitals built or with established hospitals raising standards by arranging adequate affiliation, whether for class work or hospital services.

State laws directly affecting nursing that have been passed this year are few. Virginia revised its Code of 1903 arranging a mandatory law for nurses. Virginia also passed an act providing for the training and licensing of attendants for the sick under certain conditions. The act gives the power to the state board of examiners for graduate nurses to authorize the establishment of centers of training for attendants.

In January of this year the United States Public Health Service opened its first nursing school at Fort McHenry. Mention should be made of the impetus which the Health Service has given to the preparation for nursing in tuberculosis in arranging for the course for nurses last summer and this at Oteen, N. C. As this review is rather confined to nursing activities centering around the hospital nursing department and school, it is not possible even to touch upon the outstanding developments in the field of public health nursing. The mention of this ever-increasing field for the nurse is made to emphasize more strongly to authorities in the schools of nursing their obligation to this field and the great necessity of more care in fitting the fundamental education of the nurse in the hospital to the needs of this field. In this connection theoretical and practical teaching is contagious, tuberculosis and mental nursing should again be emphasized.

It would make interesting reading to tell of the events of the year in nursing in other countries of the world, especially of the progress which the new nursing schools in Europe have made. These schools in Prague, Czecho-Slovakia; Constantinople, Turkey; Posen and Warsaw, Poland were established after the war with the assistance of the American Red Cross and are now under the supervision of the American Red Cross Nursing Service.

Significant Honor to Miss Nutting

The situation with respect to nursing in the hospitals in the world at large is well summarized by Mr. Edwin R. Embree of the Rockefeller Foundation in his account of "Hospital Development in the Orient" as follows: "The comparatively unattractive appearance of hospitals in Japan is accounted for in large part by the lack of proper nurse training and nursing care. This is true of native hospitals in general throughout the Orient. It is true for that matter of hospitals almost everywhere outside the Anglo-Saxon countries. The next great step forward in hospital care in Continental Europe as well as in the countries of the Far East must be in the training of nurses, in recruiting from higher social and intellectual classes in the development of standards, and in the extension of nursing service."

The happiest event of the year in nursing, significant of its place and progress, was the granting by Yale University of the honorary degree of Master of Arts to Miss Mary Adelaide Nutting, professor of nursing at Columbia University. In conferring the degree upon Miss Nutting, the great university through its spokesman, declared her to be "One of the most useful women in the world." A great honor fittingly bestowed. To Miss Nutting's far-seeing leadership and her undaunted perseverance may be credited the initiation of many of the reforms in nursing which promise to be most far-reaching.

THE CELESTIAL SURGEON

If I have faltered more or less
In my great task of happiness;
If I have moved among my race
And shown no glorious morning face;
If beams from happy human eyes
Have moved me not; if morning skies,
Books, and my food, and summer rain
Knocked on my sullen heart in vain:—
Lord, Thy most pointed pleasure take
And stab my spirit broad awake;
Or, Lord, if too obdurate I,
Choose Thou, before that spirit die,
A piercing pain, a killing sin,
And to my dead heart run them in!

—R. L. Stevenson.

HOSPITAL LEGISLATION AND DECISIONS IN 1922

By DOROTHY KETCHAM, Ann Arbor, Mich.

THE year 1922 was not very eventful as far as hospital legislation is concerned. The great majority of the state legislatures convene semi-annually and in the uneven years; thus 1923 will find the majority of legislatures in session, while in 1922 only Arizona, Kentucky, Maryland, Massachusetts, Mississippi, New Jersey, New York, Rhode Island, South Carolina and Virginia were in session. The session laws of Pennsylvania, Rhode Island, South Carolina, and Virginia have not as yet been published and distributed so that this record will not cover the entire field.

The decisions of the courts relating to hospital activities include only decisions handed down by the supreme court or court of last resort in the various states. The material is arranged under subheadings, the legislation enumerated first and the judicial interpretations second. Only the year 1922 is included.

Establishment and Maintenance

New Jersey amended several previous laws relating to the erection and bond issues (C 122) for hospitals. The amendments for the most part do not alter materially the general scheme previously established as in the case of the erection and control of hospitals for contagious disease (C 267) and tuberculosis hospitals (C 269). Counties with no county hospitals may assist in maintaining hospitals located in the county to the amount of $125,000 (C 157). Under the amendment relating to tuberculosis hospitals the board of freeholders is given power to establish county hospitals for the care of tuberculous persons and after the awarding of the contracts a board of five citizens of the county, at least two of whom are practicing physicians, is to constitute a board of managers. Counties with no home or hospital for the care and treatment of crippled children may assist in maintaining homes and hospitals for that purpose located in the county, not more than $30,000 a year being raised by taxation. (C159.)

New York, New Jersey, Mississippi, and Maryland, all grant subsidies to certain specified institutions. In Maryland the disbursements for the maintenance of hospitals, homes and asylums amounted to a total of $1,854,925.32. The amount given to various institutions varies enormously from that given to the Maryland Tuberculosis Sanatorium which is a public institution, the amount given being $193,983.95, to a private institution such as the United Charities Hospital of Cambridge which received $12,531.80.

County Must Vote Sanatorium

The supreme court of Illinois held that a county can maintain a tuberculosis sanatorium only after the people have voted in favor of the sanatorium. After this has been done, however, the county has authority to levy the authorized mill tax for the maintenance of the sanatorium indefinitely and without any further vote of the people. The county rate, however, cannot exceed the specified amount without reference to the people. (133 N.E. 779).

In the case of Ayers vs. Wyoming Valley Homeopathic Hospital (118 Atl. 426), the plaintiff and the hospital owned adjoining lots at Wilkes-Barre. The city passed an ordinance prohibiting the erection of hospital buildings within thirty feet of a dwelling house. The plaintiff, alleging she relied on "the security" of this ordinance, expended considerable money in the improvement of her property. The hospital prepared plans and specifications, let the contract and began construction within about twenty feet of the plaintiff's dwelling house. Later the city amended the original ordinance, allowing the erection of hospitals within twenty feet of a dwelling house. The supreme court of Pennsylvania affirmed the opinion of the court below: "When the plaintiff bought she did not buy on the faith of any established building line because there was none at the time—," nor did the fact that she made improvements on her property after the building line was stated deprive the municipality of the right to amend the ordinance and change the line.

The supreme court of Georgia again passed upon the establishment of a so-called health resort by Dr. Blackman in the city of Atlanta (113 SE 545). The application for a building permit filed with the building inspector was approved with specifications and plans. Three previous applications had been made and plaintiff was heard before the mayor and council in the second and third thereof. The judgment of the mayor and city council refusing to grant a permit to erect the building upon its previous application therefor, after a full hearing, was binding and conclusive upon the plaintiff, unless appealed from, or directly brought before the court for review.

Municipal corporations may exercise no power

except those conferred upon them by the act by which they are constituted or such as are necessary to the performance of their corporate powers and duties. Under a state law it is provided that municipal corporations have the power to make by-laws not inconsistent with state laws such as are necessary to preserve the health and improve the comfort of such corporations and inhabitants thereof. The supreme court of Arkansas in the case of Cumnock vs. City of Little Rock (243 SW 57) decided that under this provision a city may provide by ordinance for the erection of a city hospital.

Inspection and Visitation

New Jersey (C 95) extended the powers of its state board to include county insane and tuberculosis hospitals, almshouses, and privately maintained institutions and non-institutional agencies for the care and treatment of the insane, the blind, the epileptic, feeble-minded, or other institutional and non-institutional agencies conducted for the benefit of the physically and mentally defective or the care of dependent or convalescent children or both.

Maryland (C 29) placed all state hospitals under the department of welfare. The institutional boards of managers or trustees are to be retained and to report to the director of the department.

Admission and Treatment of Patients

Mississippi (C 246) defines the charity patients who shall be admitted to hospitals, it being required that their need for care be certified by three citizens of the county, two of them being practicing physicians.

There is a division of opinion concerning the extent and character of the liability of hospitals for negligence on the part of its staff or nurses. It is uniformly held that a hospital which is incorporated and conducted for private gain or for the benefit of the stockholders is liable in damages to its patients for the negligence of its officers and employes as in the case of Jenkins vs. Charleston General Hospital and Training School (110 SE 560), when a hospital received the proceeds of a fund contributed by the employes of the Western Pocahontas Fuel Company in consideration of which the company contracted with the hospital for the medical and surgical treatment of its employes.

In the case of charitable hospitals, public or private in character, it has been usually held that the institution is exempt from liability for negligence. Thus in Harber vs. Gledhill (208 Pac. 1111), the supreme court of Utah declared that a hospital and its surgeons were not liable for burns from a hot water bottle left in the bed through the negligence of a special nurse employed by the plaintiff. It is admitted that the appellants owe their patient care after the operation but that the negligence of the nurse may be imputed to her employer, the plaintiff in this case. and by whom she was personally employed.

The court of appeals of Georgia held that a hospital is not liable for mistreatment by a physician of one furnishing blood for transfusion. The plaintiff in the case volunteered her services not to the sanitarium but to the patient who was being treated and the doctor treating the patient. The acts complained of were the acts of the physician and not of the hospital. The declaration shows that if there be any liability it is the liability of the physician and not of the sanitarium. Jeter vs. Davis-Fischer Sanitarium Company (113 SE 29).

The fact that a nurse in a hospital applied the wrong drug to a patient's eye is insufficient proof upon which to base a recovery for the loss of the sight of the eye, but there must be affirmative evidence that the drug negligently administered produced the injury complained of. It seems that after an operation for traumatic cataract the physician ordered atropine but a nurse by mistake applied eserine which contracted the pupil of the eye. (Demick vs. Portland Eye, Ear, Nose and Throat Hospital, 209 Pac. 344).

A Wisconsin case releases the hospital from liability for negligence where it has merely leased the premises to the physician and is in no way connected with the treatment or care of the patient, evidence of this relation being admissable in court (186 NW 188).

Where a public charitable hospital has failed to exercise due and reasonable care in the selection of physicians, nurses, or attendants, and injury results from the incompetence or negligence of such persons, the hospital is liable. The plaintiff predicated his right of recovery of damages on the negligence of the defendant in its failure to use ordinary care in the selection and retention in its employ of a certain student assistant, who is alleged to have administered to the plaintiff an injection of scalding hot water immediately following an operation on him for appendicitis, and while he was under the influence of ether. The case was tried in the court of common pleas, reversed in the court of appeals and the pleas decision approved by the supreme court.

"The exception from liability of such organizations, subject to the condition of care in the selection and the retention of servants, which condition is so frequently found in the decisions of courts on the subject, indicates the general judgment that the exemption from the rule of respondeat superior, which experience has shown to

be a valuable aid in securing the ends of justice, should not be sweeping and complete, but should be surrounded by safeguards as will prevent the neglect of a duty which the hospital can and should perform. It cannot watch or control the countless acts and movements of its servants, but it can and should exercise care to see that only careful and competent servants minister to stricken patients who are within its walls— a public charity should not be held liable for the negligence of the servant in whose selection the hospital and its managers have exercised due care. On the other hand, such an institution is liable when it fails to exercise such care." (135 NE 287).

This case calls attention to the fact that the institution *has failed to exercise due care*, but the determination of what is due care has not been established. This may be regarded as a finding of facts determinable by the inferior courts.

The supreme court of errors of Connecticut decided that in an action for personal injuries where the services covered by a hospital bill were necessary and the charges reasonable, the admission in evidence of the charges and the reasonableness thereof was correct, regardless of whether plaintiff paid the charges. An injured person can recover as damages for reasonable medical, hospital, or nursing services rendered him, whether these are rendered him gratuitously or paid for by his employer or by one bound by contract to pay them. (116 Atl. 332.)

In an action by the proprietors of a sanatorium, the supreme court of Louisiana held the evidence insufficient to show that a charge of $2,500 for constant medical attention, nursing, and medicine from May 20, 1919 to March 3, 1920 in addition to charges for room, board, care, and attention, and an amount paid consulting physicians, was exorbitant and disproportionate to the services rendered or required. The charges of physicians are not to be determined wholly upon the skill of the physician, nor upon the amount of services rendered, but the value of the patient's estate, and his ability to pay may be taken into consideration. (91 So. 551.)

Taxation Exemptions

Mississippi (C 134) provides that all real and personal property whether belonging to religious, charitable, or benevolent organizations "which is used for hospital purposes and which maintains one or more charity wards that are for charity patients, and where all the income from said hospital is used entirely for the purposes thereof and no part of the same for profit, shall be exempt from all taxation, both ad valorem and privilege."

The inheritance tax law of Arizona (C 26) exempts from taxation the property of county, town and municipal corporation used for "strictly county, town or municipal purposes and corporations organized under its laws, or voluntary associations, organized solely for religious, charitable, or educational purposes, *which shall use the property so transferred exclusively for the purposes of their organization within the state.*"

Maryland (C 193) postponed the exemption of some hospital property held for future use for two years.

The property of an association maintaining a hospital to relieve families and to pay death benefits for members only is not exempt from taxation. Exemption from taxation depends upon the use made of the property, rather than the charitable character of the owner according to the supreme court of Colorado. (203 Pac. 850.)

The Franciscan Sisters, a religious society, founded the St. Elizabeth Hospital and held title to its property having charge of the institution. The general purpose of the institution was to nurse the sick and care for the orphans. The county levied a tax thereon and the question of exemption was raised and passed upon by the supreme court of Nebraska which says that the "property in controversy is used exclusively for religious and charitable purposes within the meaning of constitution and statutory exemption." (189 NW 981.)

Trusts

The New Jersey court of chancery held that a trust for a hospital for animals was valid: "In this and other states gifts in trust to the Society for the Prevention of Cruelty to Animals and to similar organizations have repeatedly been held to be gifts for charitable purposes." (115 Atl. 649.)

In an Illinois case a will provided that the residue of an estate should go to three trustees to be converted into money and used for the purchase of a site for and the erection of a hospital.

The court held the will sufficiently definite to create a trust "for the use of the inhabitants of Libertyville and vicinity. Because the will provides that the trustees shall receive fees and compensation for their services the gift might not be defeated as charitable nor does the fact that the recipients of the charity who are able to pay are required to do so alter the status thereof. The will clearly states that the hospital is for all licensed physicians in and near the vicinity specified.

"Gifts for the purpose of establishing or maintaining hospitals for the benefit of the sick, injured, infirm, needy, or other persons in unfortunate circumstances are recognized by the courts as charitable. A gift for such a purpose is not invalid as a charity because it does not impose poverty as a condition for admittance or because the patients who have means are expected to contribute to its support and development. Sickness, pain and suffering are the heritage of all. No man can be so rich or circumstanced as to be exempt from this condition. If so overtaken is charity to withhold its administration because the stricken sufferer may not be poor?—Charity, whether public or private, sees the need, or want, or afflic-

tion, or suffering, and its first concern is to bring relief. The question whether the recipient is able to pay is the merest incident and of minor importance. The rich should not be turned away because of their wealth nor the poor because of their poverty." (133 NE 857).

Workmen's Compensation

Maryland (C 303) amended the workmen's compensation law to include any state, county, city, or municipality engaged in any extra-hazardous work "whether for pecuniary gain or otherwise, in which workmen are employed for wages."

Miscellaneous Legislation

New York made a few minor changes in its laws. In relation to the commitment and transfer of insane veterans of the World War (C 420), official visits of the state hospital commission or a majority of the members thereof are to be made to every private institution at least twice a year. (C 168.)

The public health law in relation to cadavers in certain counties was changed slightly. (C 387).

The general municipal law in relation to public general hospitals for the care of the sick (C 265) was changed somewhat as was the provision for the waiver of examination for nurses and trained attendants. (C 288).

The general municipal law in relation to occupational therapy departments in connection with public general and tuberculosis hospitals or sanatoriums was amended (C 161).

TAKING THE SUNSHINE CURE

Heliotherapy is employed to good advantage in the treatment of these children with bone and joint tuberculosis, who are patients at Seaside Hospital, Niantic, Conn. The hospital was made possible by the annual Christmas Seal Sale of the National Tuberculosis Association and its 1,200 affiliated agencies which last month amounted to a large sum.

SPECIAL TRAINING FOR HOME NURSING

Hospital ownership of its nurses' training school, although so profitable to the hospital, is nevertheless in many ways a hindrance to the advance of the nursing profession, says Dr. Alfred Worcester, head of the Waltham Training School of Waltham, Mass in a recent article in the *Boston Medical and Surgical Journal.*

No professional school, he declares, can thus be subordinated without the sacrifice of its educational ideals. The labor of an apprentice learning a trade goes rightly to the profit of the master, and yet it cannot be considered a profession while the product of the pupil nurses' labor goes to the support of an eleemosynary institution or into the pocket of the hospital's proprietor.

In his opinion, the student of any true profession must pay for her education either in cash or in work that is its equivalent, but such payment must go entirely to the support of the school.

Nor is it to the hospital's interest to train its pupil nurses for any other service than that needed in the hospital, continues this opponent of the hospital training school. In hospital ownership of the training school the most serious detriment is that the nurses during their pupilage are not trained for the kind of service most of them afterwards undertake, which is the nursing care of the patients in their own homes. The great reason for the prevailing distaste of graduate nurses for private nursing is that most of them have not been adequately educated for it.

In home nursing, there is a necessity of a self-dependence that cannot be acquired in hospital service where head nurses and house officers can be summoned to decide doubtful questions.

Again, Dr. Worcester says, training in the hospital teaches the nurse, besides her duties to her patients, her proper relation to the doctors, to her superiors, to her classmates and to her juniors; but all she learns of her proper relation to her patients' anxious families is to shoo them out when visiting hours are over. In home nursing the sooner that particular lesson is unlearned the better, for success there depends upon utilizing for her patient's sake every anxious relative, all the friendly neighbors, and especially the servants. This requires an immense amount of tact. Some fortunate individuals are naturally tactful; some are not. But tact is acquirable; it is merely the effective expression of a kind and thoughtful nature.

Between assuming all the nursing service in the home and undertaking that part of it which the family perhaps only gradually can be convinced it cannot so well perform, there is a vast difference; and the recognition of this essential difference—between excellent and unacceptable service in home nursing—is a hard lesson for fully trained nurses to learn. It is far easier learned by pupil nurses, and that is the great reason why pupil nurses' service is often preferred by families who do not even think of the greater expense of graduate nurse service.

"Have ye
Not read how once when famine held fierce sway
In Lydia, and men died day by day
Of hunger, there were found brave souls whose glee
Scarce hid their pangs, who said, 'Now we
Can eat but once in two days; we will play
Such games on those days when we eat no food
That we forget our pain!' "

—Helen Hunt Jackson.

A HISTORY OF DIETETICS

By AGNES O'DEA, Dietitian, Johns Hopkins Hospital, Baltimore, Md.

A review of the work in dietetics and dietotherapy during the past year is chiefly a record of continued growth. The record of this profession might be compared to that of a healthy child, the chart reading something like this: size and weight show a normal increase; active and vigorous; a lively interest in what is happening in the world about him, and an eager grasping of everything which appeals as helpful in the development of the profession.

First, there was the work of the nutrition expert. then the pathologist, and later the biologist. We now have acquired about all we can manage until we have become a little more mature, but it is only a question of time before that stage is reached.

Attention during the past year has been focused on the newer findings in the treatment of diabetes. Iletin, or insulin, as it is called in Great Britain and Canada, promises much for the treatment of this difficult disease. At the time of writing this, however, only enough iletin has been produced to care for 125 people so evidently the diet will still be the chief factor of treatment for some people. The high fat dietary for diabetes as advocated by Newburgh and Marsh of Ann Arbor is being used successfully in many places though not all clinicians are agreed as to its value. This dietary has been discussed somewhat in detail in THE MODERN HOSPITAL. *(Sept. 1921 and Feb. 1922.)*

The meeting of the American Dietetic Association in Washington was an enthusiastic one and the program offered much of inspiration.

The report of the committee for foods and equipment for food service of the American Hospital Association as presented by the chairman, Dr. C. W. Munger, indicates that more thought is being given to this department in hospitals. The report was read at the meeting of the section on dietetics of the American Hospital Association and published in the November issue of THE MODERN HOSPITAL. *Other subjects discussed at the meeting of this section were "The Dietary Problem in Children's Department of Hospitals" and "The Organization of The Dietary Department." The large attendance at this section meeting is another evidence of the increased attention shown by hospital executives in the food service of their institutions.*

The need for well trained administrators in this department continues, and no solution of the problem has yet been offered.

At the annual meeting of the American Dietetic Association, Mrs. Agnes O'Dea, for many years dietitian at Johns Hopkins Hospital, read a history of the early days of dietetics. Her paper is an interesting departure from the usual discussion, and it has been chosen to use it instead of the regulation review of events of the past year. —EDITOR'S NOTE.

IN THE days of Hyppocrates, dietetics was the province of the physician who thus aimed to undo the evils caused by wrong living. The value of food and rest in the treatment of disease is spoken of in histories of Ireland in 300 B. C. and in India in 252 B. C. Later economists applied dietetic principles to the feeding of the poor in European cities, and various countries of the world have employed experts to prescribe rations for keeping the army and navy in fine physical condition at the least expense to the government. The victory of the Franco-Prussian War has been ascribed to the food experiments of German chemists.

Origin of Term "Dietitian"

The word *diet* or *dietary* in its modern significance appears to have a mixed origin, the derivation of which can be traced back to a Greek word signifying "manner of living." The word *dietist* is first found, according to Murry's Standard Dictionary, in 1607, and is defined as "one who professes or practices dietetics." In this it has a personal, and not a group meaning. As early as 1,469 the word "caterer" is used as: "a purveyor of provisions for the entertainment of a family or group." At the Lake Placid conference in 1905 the subject was under discussion as to the proper name for an institution food expert. Various ones were suggested—*euphagist*, to which the chief objection was that it would mean the eater, rather than the provider; *dietist*, as being shorter than dietitian; *refrectioner*, as the correlative of the recently revived "refrectory." All the terms founded on *diet* were pronounced objectionable in those days because of their hospital atmosphere. The suggestions for a better name than dietitian were invited, but none seemed to be forthcoming.

We are somewhat in the habit of thinking of the institution as rather a new thing—a conspicuous feature of modern life. It is true that its development has been rapid in the last decade, but in one form or another it has been with us for centuries. Connected with it has been a food department, the heart of the institution, though little thought on. But a few years ago the dietary department of a hospital was managed by two or three persons: a steward or purveyor; a matron or housekeeper; or perhaps a cook and a teacher of cookery, if a training school for nurses was connected with the hospital.

The steward purchased the food, though often he had little or no previous experience and was little interested. The matron's interest was divided, for not only did she have to plan the meals, but there was the daily fight for cleanliness in the kitchen, halls and bedrooms. She had as a rule no knowledge of food principles or balanced dietary, though she might have well cooked, daintily served food, had she had the time for this.

Efforts of Florence Nightingale

The need for greater knowledge and adjustment in the feeding of the group, whether in prison or in hospital, had long been recognized. In "Eminent Victorians" we are given a graphic account of Florence Nightingale's efforts to reorganize the kitchens and laundries of the hospitals during the Crimean War. "The ill cooked hunks of meat, vilely served at irregular intervals, which had hitherto been the only diet for the sick men were replaced by puncheal meals, well prepared and appetizing, while strengthening extra food, soup, wine and jellies ("preposterous luxuries"), were distributed to those who needed them. One thing, however, she could not effect, the separation of the meat from the bones, which was no part of official cookery: The rule was that the food must be divided into equal portions, and if some of the portions were bone—well, every man must take his chance! It would require a new army regulation of the service to bone the meat."

In 1852, John Stanton Gould wrote his report on "Prisons and Diets" and in 1864, we find a report on the classified dietary of the Bengal Presidency, with the appendix showing the results of the dietary as exhibited by the weights of the prisoners subjected to it on admission and discharge, and the cost of the experiment.

Up to this time, although the need was felt for the supervision and revision of the dietary, there had been no opportunity for that training of the one directing these activities. When one recollects that the first institution in America for the higher education of women, Mount Holyoke, was opened in 1835, and the first scientific institution to open its doors to women was the Massachusetts Institute of Technology in 1876, one will realize how few opportunities there were for women to study either chemistry or any other of the sciences up to this time.

First Woman Enters Science Course

Five years, however, before women were formally admitted to the courses at the Institute of Technology, an energetic young woman from Vassar, eager to devote her life to the pursuit of science, had been allowed to enter as a special student in chemistry.

As she was the first woman in the United States to enter a strictly professional school, her entrance marks the beginning of a new epoch in the history of education for women. The name of this ardent votary of science was Ellen H. Richards. She had not devoted herself long to the study before she resolved to apply the knowledge gained to the problems of daily life. She was one of the first leaders of the crusade for pure food, and the proper preparation of food materials. In this she was eminently successful and was able to achieve for home economics what the illustrious Liebig had many years before accomplished for agricultural chemistry—putting it on a firm and lasting basis. To her the kitchen was the center and source of political economy.

"Life," she wrote, "is conditioned on the food supply, and the first place in which all the best scientific knowledge of food as a remedial agent should be applied, is in the hospital kitchen. But, as the old adage, 'shoemakers' children go barefooted,' so the hospital kitchen is among the last to show the effects of modern science. The hospital is a great educational factor in hygiene for the masses, whose attention is sharply drawn to the need of cleanliness and care. Why should it neglect the most important of all, the food? The hospital should take the initiative and not be forced by public opinion. Its prestige as to advancement is well established in medical and surgical lines; it should now lead in food as a therapeutic agent."

In 1869 we learn that the first seed was planted for the future college instruction of dietitians, when the matron of Iowa State College, in connection with the duties as steward of the boarding department, required each young woman to work an extra two hours a day in the dining room, pantry and kitchen of the institution under careful supervision. In 1879, the Boston Cooking School, the first incorporated cooking school in America was started. It was from this school that the first dietitians came.

Cooking School Begins at Johns Hopkins

In the year 1889, Johns Hopkins Hospital opened its doors and we read that "the purchase and delivery of provisions and the cooking and distribution and serving of food are placed in the hands of the purveyor who is made responsible for this branch of hospital work. The superintendent of nurses shall see that proper economy is exercised in the distribution of food." Within a few months, however, it became evident that additional facilities were required for teaching pupil nurses the science and art of cookery for the sick, and Miss Mary Boland, a graduate of the Boston Cooking School, was appointed to organize a cooking school for the hospital. This was the first arrangement for a resident diet teacher made in any training school.

Thus it was that Miss Isabel Hampton, the first superintendent of nurses of the hospital, planned and carried into effect systematic instruction in dietetics and cookery. A diet kitchen was fitted

up for the purpose in connection with the general kitchen of the hospital and the nurses went in rotation for periods of instruction of from three to four weeks in practical work in cooking school.

In Miss Hampton's first report we read:

"The organization of the cooking school resembles that of a ward, with its head nurse and pupils, the teacher corresponding to the head nurse. Two pupils are sent to her for a month at a time. Their hours on duty are from half past seven to half past five. The first hour and a half is spent on two private wards where each pupil takes charge of the preparation for the breakfasts, makes toast, arranges the trays daintily and gets everything in readiness for the breakfast, which arrives from the general kitchen at eight. Then they serve the trays and leave the wards at nine, going directly to the cooking school kitchen which is a small room conveniently situated and easily accessible to all the wards. There they meet the teacher and the day's instruction begins.

"The course includes the general subject of preparation of beef essences, beef tea, broiled meats, steaks, chops, birds, gruels, porridges, mushes, drinks, jellies, toasts, soups, broths, oysters, eggs, potatoes, custards, sherbets, creams, frozen fruits cordials, salads, koumiss and all simple dishes, such as baked apples, boiled rice, etc.

"The beef tea, chicken and mutton broth for the use of the entire hospital are made each morning and in addition practical demonstrations of the process of making dishes selected from the above schedule are given by the teacher every forenoon. The method of preparing about 150 different articles of sick diet is taught during the month and each article is made at least three times by the pupils themselves. The greatest part of the day's cooking is distributed among the various wards at noon.

"The afternoon hours are chiefly devoted to theoretical teaching which includes for example, talks on the effect of heat on food, the chemistry of food, etc. Toward the end of the month a practical test is given of the proficiency of each pupil by requiring her to make as large a number of dishes as possible without aid either of teacher or notes. An oral examination is given at the end of the course and this is followed at the end of another month by a written test."

In 1900 changes were made in the work of the diet school by which a considerable increase in the amount of teaching was given to a united class, the theoretical work being covered in a course of eight lectures.

In 1901 a radical change was made in the training school whereby it was possible to give the first year students training in household science which was greatly to the advantage of the pupil nurses and the hospital. In order to meet the necessities of the course the students were given work in connection with the kitchens of the nurses' home, assisting in the preparation of the food under direction of Miss Emma Smedley who was known as "diet school instructor." One also learns that this year "the per capita cost of food was reduced from 30 cents to 24 cents, though the quality of food and service was improved." A second instructor was added at this time.

For four years the nurses' home kitchen was used as a laboratory and valuable experience was obtained there. It was felt that if food could be prepared for the sick, still more experience could be had and better teaching given. With this object in view, larger quarters were secured with a class room, as well as kitchen, where food for private patients was prepared and special order filled. In November, 1905, probationers were placed there, and the entire service of food for private patients was carried on in a most satisfactory manner under Miss Peacock and Miss Newlands. In consequence, there was greater improvement in the serving of food together with manifest economy in the use of materials.

The diet school was created to provide instruction for the student nurses, and the dietitian was purely a teacher up to this time. The year 1913 marked the reorganization of the work and the establishment of a dietary department.

Dietary Department Organized

For eight years the nurses had done practically all the cooking for the private patients, a service which made increasing demands upon the nurses, with the result, that much of their time had been taken up in routine work which should have been spent in the study of special cooking. With the changes made at this time all the routine cooking was transferred to the main kitchen and the work of the diet kitchen limited to special diets, salads, desserts and special orders. To Miss Alice P. Atwood was given the work of the organization of the dietary department, taking over the work previously undertaken by the purveyor in the planing of the menus, and supervision of the preparation of all food for the wards, staff and employes. Under her was a staff of assistants, each having their own field of labor, but responsible to her.

"Thus," to quote Miss Nutting, "the administrative dietitian has been called into existence. The general welfare of all, in one sense, depends upon her conception of her task. She is the administrator, a student of organization, of production, of consumption, of markets, of costs. She is the employer of labor. Her kitchen is in a sense a factory, the output of which is of extraordinary import."

DR. C. S. WOODS TO COLORADO

Dr. C. S. Woods, president of the Protestant Hospital Association, has been appointed executive secretary of the board of directors of the national tuberculosis sanatorium to be established in Colorado Springs, Colo., by the Methodist Episcopal church. Citizens of Colorado Springs have donated a $250,000 site for the tuberculosis hospital, and the Methodist Church will maintain it. Dr. Woods until recently has been connected with the Methodist Episcopal Hospital in Indianapolis as its superintendent. Formerly he was professor of preventive medicine and hygiene at the University of Iowa and health officer of Indianapolis.

PRESIDENTS OF SEVERAL STATE AND SECTIONAL HOSPITAL ASSOCIATIONS

1. Dr. Fred S. Clinton, Oklahoma; 2. W. W. Rawson, Utah; 3. Dr. Lewis A. Sexton, New England; 4. Dr. B S. Pollak, New Jersey; 5. Dr. W. C. Gewin, Alabama; 6. Dr. A. R. Hatcher, Kansas; 7. Dr. John A. Williams, North Carolina; 8. Charles Lee, Connecticut; 9. Dr. L. H. Burlingham, Missouri; 10. Frank E. Chapman, Ohio; 11. W. J. Clark, South Carolina.

THE YEAR IN HOSPITAL SOCIAL WORK

By MARY ANTOINETTE CANNON, President, American Association of Hospital Social Workers, New York.

ONE of the steps forward in hospital social work during the year 1921-1922 has been a study of the question of training, which has resulted in the stating of a position and the formulation of a plan by a representative group. The acceptance, rejection, or modification of this plan by the body of workers would seem to be the next step. The study has been made by a committee appointed in the spring of 1921 by the American Hospital Association, on which were members representing clinical medicine, hospital administration, public health nursing education, social work education and hospital social work.

The committee's report has been submitted to the American Hospital Association and will no doubt soon be available to all who are interested in the subject. The plan proposed by the committee is a single two-year course including all necessary medical and social elements of education and training, so arranged as to permit the allowance of credit for units of work which may have been already completed. Two schools, the New York School of Social Work and the Boston School of Social Work, have already modified their teaching of hospital social work in accordance with the recommendations of this report, by way of educational experiment.

Interesting Developments in Field

The extension of hospital social work during the past year has not been rapid, but there have been a number of interesting developments. Departments have been organized and improved in Pittsburgh. An experiment in combining administrative and social work has been made in the pay clinic of Cornell Medical School. A department of hospital social work has been established in Honolulu, under direction of Miss Margaret Catton. These and other enlargements indicate progress in the field and a promising future for well trained workers. The laborers are still too few.

A new directory of departments of hospital social work has been prepared by the Service Bureau of Social Work, a bureau of the American Hospital Association. The directory is obtainable from the Chicago office of the American Hospital Association. Work also has been done on a bibliography of hospital social work. In this the Library and Service Bureau has collaborated with the Service Bureau of Social Work and the American Association of Hospital Social Workers.

The American Association of Hospital Social Workers has been strengthened by the further growth of districts. Indiana, Minnesota, and Michigan completed organization in 1922, and the districts previously recognized have carried on vigorous programs and given both moral and financial support to the parent association. Miss Lena Waters of Baltimore was appointed executive secretary of the association in February, 1922. Owing to an enforced leave of absence her work has been much interrupted but she is again in harness and has already made improvements in the *Bulletin* of the association, and in the office machinery. Johns Hopkins Hospital has generously provided headquarters and both executive secretary and treasurer are now housed there with great advantage as to facility of cooperation between the two offices.

Psychiatric Section Organized

An innovation of the year has been the organization and recognition of a Section on Psychiatric Social Work within the general association. According to the constitution of the new section, membership in it is dependent upon membership in the American Association plus certain other well defined requirements as to training and experience. This type of functional division has as a precedent the practice of the Illinois district where the original organization plan included a number of functional groups each of which held its own meetings throughout the year in addition to carrying its share in the program of the district as a whole. It is the hope of the psychiatric group to be able to contribute to the progress of the American Association through its special activities in its own field as well as through the more general participation of its members in the work of the Association.

The association held two meetings in 1922, the annual, at Providence in June, at the time of the National Conference of Social Work, and the semi-annual, at Atlantic City in September with the American Hospital Association. Both meetings were well attended and the programs were received with interest and enthusiasm. The following officers were elected at the June meeting:

President, M. Antoinette Cannon, New York; first vice president, Ruth V. Emerson, Boston; second vice president, Gertrude L. Farmer, Boston; third vice president, Marian A. Tebbets, Minneapolis; secretary, Lena R. Waters, Baltimore; and treasurer, Margaret S. Brogden, Baltimore.

Executive Committee: J. N. Kniseley, Toronto;

Mrs. Bess L. Russell, Chicago; Helen L. Hillard, Pittsburgh, Pa.; Ida M. Cannon, Boston; Mrs. C. W. Webb, Cleveland; Mrs. Wayland Magee, Omaha; Edith Howland, Washington; Katherine McMahon, Boston; Amy F. Cleaver, New York; and Mary C. Jarrett, Northampton, Mass.

Advisory Council: Dr. Richard C. Cabot, Boston; Dr. C. Macfie Campbell, Boston; Dr. W. P. St. Lawrence, New York; Miss Mary E. Richmond, New York; Mr. Michael M. Davis, Jr., New York; Dr. E. E. Strecker, Philadelphia; Dr. A. R. Warner, Chicago; Dr. Wm. P. Lucas, San Francisco; Dr. M. T. MacEachern, Canada; Dr. Winford Smith, Baltimore; Dr. Charles P. Emerson, Indiana; Mrs. Henry M. Thomas, Baltimore; Dr. L. H. Burlingham, St. Louis; Miss Edna G. Foley, Chicago; and Dr. Hugh Cabot, Ann Arbor, Mich.

THE CATHOLIC HOSPITAL ASSOCIATION OF THE UNITED STATES AND CANADA

By B. F. McGRATH, M.D., Secretary-Treasurer, Catholic Hospital Association, Milwaukee, Wis.

JUNE, 1922, marked the seventh anniversary of the Catholic Hospital Association of the United States and Canada and witnessed its seventh annual convention. In reviewing the association's history since its origin in the year 1915, there appears to be good reason for satisfaction with what has been attained.

Beginning with a membership of 43 hospitals and 24 individuals, during its rather short life the association has reached nearly the 500 mark in hospital and the 1,600 mark in individual members, most of the latter being doctors.

Works for Hospital Standardization

In its policy of development, starting with the educational, it next emphasized the necessity and need of team work, and finally entered wholeheartedly into the present-day great movement for so-termed standardization. As an indication of the spirit, response, and actual endeavor is the relatively high percentage of Catholic hospitals that has been recognized in the rating of both the American Medical Association and the American College of Surgeons.

For the realization of its purpose the organization has introduced various factors into its work, including summer schools for laboratory technicians; diocesan directors of hospitals; state, district, or provincial conferences; hospital visiting; and an official magazine, *Hospital Progress*. Another factor, now in the process of development, is the establishment of guilds for the student nurses and alumnae of the hospitals.

Already a large number of the dioceses are represented by directors, clergymen, whose function it is to promote the general welfare of the hospital—spiritual, scientific and material.

Fourteen Sectional Conferences Organized

The first sectional conference (state, district or provincial) was organized in September, 1920. Since that time, fourteen such conferences have been organized, some of them including several states or provinces in their respective units. Already many of the conferences have held two annual meetings, and in their transactions all have manifested strength, both as regards organization and achievement.

Hospital Progress, the official magazine, has made rapid strides. In its circulation, copies now reach not only various parts of the United States and Canada, but also foreign countries, including South America, Newfoundland, England, Australia, British East Africa and Italy. This success is to be attributed mainly to the strength of the association and its plan of organization, for, as is obvious, the life of the magazine must depend entirely on a large and constantly active membership.

At the 1922 convention the association adopted its own standard which includes, not only what is consistent in other standards that have been presented, but also factors in which the association has a special interest tending towards still higher uplift.

As in the past, the association will still continue to cooperate with all whose activities for the betterment of hospital service which are guided by the principles that are proven and true.

HOSPITAL DIETETIC COUNCIL FORMED

To deal with dietetic problems relating purely to hospitals and dispensaries there has been organized the Hospital Dietetic Council, of which Miss Rena S. Eckman of the University Hospital, Ann Arbor, Mich., is president and Mrs. John Henry Martin of the Charles T. Miller Hospital, St. Paul, is secretary. The Council will have conferences and annual meetings which will deal with problems in their particular field. In announcing its organization the officers declare the Council is in no sense revolutionary nor in any way does it compete with any other existing organizations.

HOSPITAL ACTIVITIES OF THE UNITED STATES PUBLIC HEALTH SERVICE DURING 1922

By C. H. LAVINDER, Surgeon, U. S. Public Health Service, New York (Stapleton), N. Y.

DURING the past year, a radical change has taken place in the hospital work of the Public Health Service by the transfer to the U. S. Veterans' Bureau on May 1, 1922 of all hospitals operated for the medical care and treatment of veterans of the World War. This has, of course, resulted in a very sharp reduction in the volume of work which was carried on by the Public Health Service for three years or more, under an act of Congress approved March 3, 1919.

With the creation of the Veterans' Bureau, August 9, 1921, the responsibility for this work, temporarily carried by the Public Health Service, passed to that bureau, and provision was made for the transfer by executive order to the Veterans' Bureau of any or all hospitals operated by the Public Health Service for the care of veterans. This was accomplished May 1, 1922, leaving the Public Health Service responsible for only its own system of marine hospitals, with the treatment therein of such veterans as might be referred by the Veterans' Bureau. The number of veterans so treated is small and will decline.

War Necessitated Tremendous Expansion

The Public Health Service has for many years operated a small system of hospitals, the total bed capacity of which in 1919, was about fifteen hundred. The sudden and unexpected assumption by this Service of responsibility for the medical care of veterans, with demobilization of the military forces of the United States, created a national emergency. A small system of hospitals and a small organization had, under stress, to be tremendously expanded to meet immediate demands.

Without entering into details, it is sufficient to state briefly what was accomplished during the three years or more of this work.

Funds were not available for the construction of hospitals. It was necessary to meet an immediate and steadily increasing demand. Contracts were made with civilian hospitals all over the country, buildings were leased and remodeled, and use was made of facilities created by the Army, Navy, or other services during the war. By such means, hospitals were opened with great rapidity. They included provision for the care and treatment of general medical and surgical cases, pulmonary tuberculosis and neuro-psychiatric disorders. Hospitals were numbered serially, and the highest number reached was 82. Since many were closed, this does not represent the total operating at any one time. The maximum number in operation at one time was 68, and the largest number of patients cared for at one time was 17,487. Many, if not most, of these institutions were unsatisfactory from a physical standpoint. Every attempt was made, however, to organize and operate a hospital system with high professional standards. There were, of course, also a large number of patients cared for in contract hospitals under the general supervision of the Service.

U. S. Marine Hospital No. 10 at Key West, Fla., has a picturesque setting

U. S. Marine Hospital No. 21 at Stapleton, N. Y., is the largest of the general hospitals of the Public Health Service

Broad plans were made for the creation of an efficient system of out-patient dispensaries so located as to be most convenient to the disabled veteran and to supplement satisfactorily hospital activities. In the larger centers of population, these were large, well equipped dispensaries, adequate for all sorts of diagnosis and out-patient treatment. In the smaller places, they were not so pretentious, but well organized and efficient. At the height of the work there were in operation about fifty-five of these dispensaries.

For the purpose of reaching the disabled veteran in the field there was created a decentralizing district organization, which with its headquarters and sub-agencies reached into almost every county of the United States. This organization solved many difficult problems. Its importance and necessity are attested by the fact that it still serves to carry on the field work of the Veterans' Bureau.

The U. S. Marine Hospital of the Northwest is No. 17 at Port Townsend, Wash.

In the performance of all of this work, the Public Health Service assembled an organization which, at the height of the work, included some 3,500 doctors (with attending specialists), a corps of about 200 dental officers, 1,750 nurses, 500 aides for occupational and physiotherapy, 140 trained dietitians, and a total additional operating personnel of 12,000 persons.

During the three years or more of this work by the Public Health Service, there were cared for in hospitals a total of about 275,000 disabled veterans, to whom were given nearly 14,500,000 days of hospital relief. The total number of out-patients treated during this period was approximately 820,000, to whom were given a total of over 2,000,000 treatments. The total number of physical examinations made of disabled veterans was nearly 1,500,000. In this work, it is probably safe to say that the Public Health Service came into personal contact with about 1,000,000 individual veterans of the World War, to whom it furnished some type of relief or assistance.

It was also necessary to create and maintain an adequate inspection service for the purpose of keeping under constant surveillance these numerous activities. Supplies for this large organization were secured through a purveying service organization under the bureau of the public health service. The personnel was recruited and managed through cooperation with the personnel division of the bureau of the Public Health Service, and finance and accounts were administered in a similar manner. Coordination of all these activities with other government departments and governmental agencies involved, proved a problem of no small importance. The medical service and recreational activities of the hospitals were supplied through the cooperation of the American Red Cross, which organization, at its own expense, maintained in these hospitals an excellent service. Assistance was secured also from other nonofficial agencies, such as the American Library Association, the Knights of Columbus, the American Legion and many others.

From the beginning, the Public Health Service fully realized the need of some permanent building program for the care of disabled veterans. In conjunction with the Bureau of War Risk Insurance, it presented to Congress in the fall of 1919, a document carefully reviewing the entire situation. It was estimated in this document that there would be required within two years, a total of not less than approximately 30,000 hospital beds for

the care of disabled veterans, and recommendations were made for appropriations to begin the construction of hospitals on a commensurate scale. Congress appropriated, in 1921, first $18,600,000 to which was added later, $17,000,000 additional. With these funds, hospitals have been undergoing construction and are now beginning to be put into use. All of these hospitals are, of course, under the U. S. Veterans' Bureau.

In accordance with the policy of Congress and under law, all of these activities were gradually transferred, first, to the Bureau of War Risk Insurance and later to the U. S. Veterans' Bureau. As stated, these transfers culminated in the transfer of the hospital system. All organizations were transferred complete with their operating personnel, and these organizations today are continuing successfully to operate under the U. S. Veterans' Bureau.

U. S. Marine Hospital No. 2 at Boston is attractively situated.

Of the hospitals, there were transferred 44 operating hospitals with, in round numbers, a medical and dental personnel of 925 (including attending specialists), 1425 nurses, 425 aides and 110 dietitians; a total operating personnel of about 11,500 persons. The bed capacity of these hospitals was 17,500 and they contained at the time over 13,000 patients.

As stated, this leaves the Public Health Service still in control of its system of U. S. Marine Hospitals, which it has operated for a large number of years. These hospitals are maintained for the care of certain designated federal beneficiaries, among whom are seamen of the American Merchant Marine, officers and seamen of the Coast Guard Service, beneficiaries of the Employes' Compensation Commission, and certain other employes of various departments of the national government. There are also treated in these hospitals a certain number of disabled veterans of the World War, and a certain number of immigrants who arrive in this country sick or disabled. Provision is also made for the care of foreign seamen and some other patients on a per diem basis.

At the present time, this system of hospitals numbers twenty-four, and with one additional soon to be opened, will shortly number twenty-five. With three exceptions, they are all general hospitals. Included, however, are one hospital for pulmonary tuberculosis in the southwest, a national leprosarium for the care of any citizen of the United States suffering from leprosy, and a large hospital in the city of New York for the care of arriving aliens. These hospitals are well organized and are supplying a high grade of professional service. Unfortunately, the physical plants of most of these hospitals are not of modern construction, and many are not in the best condition, funds not being available for this purpose.

These hospitals, of course, are operated under the hospital division of the Bureau of the Public Health Service, and are in charge of commissioned officers of that service, detailed for the purpose. They have adequate personnel, both professional and otherwise, and are for the most part, well equipped to carry on modern hospital activities with a good degree of satisfaction.

The volume of work done in these hospitals is

One of the twenty-four marine hospitals is No. 5 of Chicago.

Mobile, Ala., is the home of U. S. Marine Hospital No. 13.

by no means small, and it is increasing steadily each year. During the past fiscal year, ending June 30, 1922, this system of hospitals furnished medical care and relief in hospital to 34,215 patients, to whom it gave a total of 1,003,725 days of hospital relief. It also furnished treatment to 137,539 out-patients, to whom it gave 224,245 out-patient treatments. It supplied to its beneficiaries 86,362 physical examinations.

Employed in this work during the year, there were approximately 160 doctors, 75 attending specialists, 310 nurses, 45 aides and 25 dietitians. There were supplied also a dental service requiring about 20 dental officers. The total operating personnel of these hospitals was, exclusive of the above named, about 1,500.

These hospitals are located all over the United States, but practically always on its coast line or on its navigable streams. The largest of the general hospitals is on Staten Island, New York, which has a capacity of about 300 beds. The Immigration Hospital at Ellis Island, New York, has a capacity of over 600 beds. There are also hospitals of 200 beds or more at other large ports. Several of these hospitals, however, are of small bed capacity. Their total capacity at the present time is about 3,300 beds.

In order to meet all demands, it is necessary both in the case of hospital patients and of out-patients to make contracts with non-official agencies for the care of a certain number of beneficiaries.

U. S. Marine Hospital No. 16 at Portland, Me.

CANCER MORTALITY RATE HIGHER IN NORTHERN STATES

The department of commerce announces that the returns compiled by the bureau of the census show that over 76,000 deaths were due to cancer in the death registration area of the United States in 1921, and assuming that the rest of the United States had as many deaths from this cause in proportion to the population, the total number of deaths from cancer in the entire United States for 1921 was 93,000, while for 1920 the number is estimated as 89,000 or 4,000 less than for 1921.

The trend of the cancer death rate is upward, the rate for 1921 being higher than that for any earlier year in 23 of the 34 states for which rates are shown in the following table. The cancer death rate in the registration area in 1921 was 86 per 100,000 population, against 83.4 for 1920. In comparing the death rate from cancer in one state with that in another, the bureau uses "adjusted" rates in order to make allowance for differences in the age and the sex distribution of the population, because generally speaking, only persons in middle life and old age have cancer, so that a state with many old persons may be expected to have more deaths from cancer than a state with comparatively few old persons.

The highest "adjusted" cancer rate for 1921 is 99.6 per 100,000 population for the state of Massachusetts, and the lowest is 47.6 for the state of South Carolina.

For a few states adjusted rates have been calculated separately for the white and colored population. In this group of states the highest adjusted cancer rate for the white population is 95.9 per 100,000 population for New York and the highest rate for the colored population is 90.6 also for New York. The lowest adjusted cancer rate for the white population is 51.5 for Tennessee and the lowest for the colored population is 36.4 for Florida.

Summarized briefly, the adjusted rates show that the Northern states have comparatively high and the Southern states comparatively low cancer mortality, while there is little difference between the adjusted cancer rates of the white and colored races of the same states. In other words, the white and colored races seem equally susceptible to cancer, but both races seem less susceptible in the South than in the North.

COURTESY IS ALWAYS AT PAR

Courtesy is the one medium of exchange which is accepted at par by the best people of every country on the globe. It is sentiment cloaked in reasonable and business-like expression, the embellishment that adds tone and harmony to matter of fact routine, the oil which lubricates the machine of commercial good fellowship and promotes the smooth running of the many units of an organization.

Courtesy radiates a spirit of good feeling that we are not working entirely for what we get out of work in a material way, but for the pleasure of polite transaction and friendly association as well.

Life is not too short and we are never too busy to be courteous, for courtesy is the outward expression of an inward consideration for others.

The day returns and brings us the petty round of irritating concerns and duties. Help us to play the man, help us to perform them with laughter and kind faces, let cheerfulness abound with industry. Give us to go blithely on our business all this day, bring us to our resting beds weary and content and dishonored, and grant us in the end the gift of sleep.—R. L. Stevenson.

A DEVELOPMENT OF HOSPITAL FACILITIES FOR DISABLED VETERANS OF THE WORLD WAR*

Publication Authorized by Colonel Charles R. Forbes, Director, U. S. Veterans' Bureau.

THE construction of government owned and operated hospitals with the consequent abandonment of many of the "contract" institutions has been the outstanding development in the care and medical treatment of disabled veterans during the past year.

The plan of the U. S. Veterans' Bureau, which is charged with the entire responsibility of hospitalizing these veterans, contemplates the treatment of all ex-service men in government institutions of a modern, fireproof type, completely furnished with the best scientific equipment and appurtenances.

The administrative control of this program was unified by the executive order issued by President Harding on April 29, 1922, whereby all hospitals caring for disabled veterans, which had hitherto been operated by the U. S. Public Health Service, were transferred to the Veterans' Bureau. All of these hospitals giving care and treatment to disabled veterans are now, as a result of this executive order, under the direction of the Veterans' Bureau.

Hospital Projects Under First Langley Bill

Public Act No. 384 passed by the Sixty-sixth Congress appropriated $18,600,000 for the provision of hospitals for veterans of the World War. This bill is commonly known as the first Langley bill. It was signed by the president on March 4, 1921 and made the Secretary of the Treasury responsible for the provision of these hospitals. The Secretary of the Treasury allotted the moneys appropriated by this bill as follows:

USPHS No. 27, Alexandria, La.	(TB)	$ 59,816.17
USPHS No. 63, Lake City, Fla.	(TB)	278,000.00
USPHS No. 50, Prescott, Ariz.	(TB)	580,000.00
USPHS No. 62, Augusta, Ga.	(NP)	870,783.00
USPHS No. 55, Fort Bayard, N. M.	(TB)	992,500.00
USPHS No. 60, Oteen, N. C.	(TB)	473,000.00
USPHS No. 42, Perryville, Md.	(NP)	485,000.00
Nat. Home for DVS., Milwaukee, Wis.	(TB)	1,400,000.00
Nat. Home for DVS., Dayton, Ohio.	(TB)	760,000.00
Nat. Home for DVS., Marion, Ind.	(NP)	100,000.00
USV Hosp. No. 85, Ft. Walla Walla, Wash.	(TB)	450,000.00
USV Hosp. No. 78, Ft. Logan H. Roots, Little Rock, Ark.	(NP)	250,000.00
USV Hosp. No. 86, Ft. McKenzie, Wyo.	(NP)	177,000.00
Prov. Hosp. No. 4, Rutland, Mass.	(TB)	815,000.00
USV Hosp. No. 81, Bronx, New York City	(NP)	3,485,000.00
Negro Hospital, Tuskegee, Ala.	(TB) (NP)	2,010,000.00
U. S. V. Hosp., No. 24, Palo Alto, Calif.	(NP)	1,303,619.65
Aspinwall, Pennsylvania	(TB)	1,000,000.00
Jefferson Barracks, St. Louis, Mo.	(Gen)	1,183,350.00
Chelsea, New York	(TB)	1,000,000.00
N. H. D. V. S. (Milwaukee, Dayton, Marion)		39,374.00
Marine Hospital No. 5, Chicago		972.17
N. H. D. V. S. (Battle Mt., Hot Springs, S. D.)		977.17
N. H. D. V. S. (Leavenworth, Kan.)		16,601.76
Equipment		600,000.00
Total		$18,320,993.77
Balance		279,006.23
		$18,600,000.00

Eight hospital projects under the first Langley bill were turned over at the close of the past fiscal year ending June 30. By that date, in these institutions there were made available for the treatment of tuberculous, mental, and general patients, 1,664 beds located as follows: Lake City, Fla., 100 beds; Whipple Barracks, Ariz., 422 beds; Little Rock, Ark., 240 beds; Fort Walla Walla, Wash., 100 beds; Fort Bayard, N. M., 250 beds; Fort McKenzie, Wyo., 100 beds; Bronx, N. Y., 452 beds. At the end of the past fiscal year the Treasury Department was completing the providing of 300 additional beds at Perryville, Md., and extending the hospital in the Bronx, New York, to a full capacity of 1,000 beds. The funds appropriated by this first Langley bill were expended by the treasury department under what

Bird's eye view of Hospital No. 60 at Oteen, N. C., an institution for 1,100 tuberculosis patients

*Prepared by John R. McDill, M.D., General Medical Consultant.

was known as the White committee, under the chairmanship of Dr. William Charles White of Pittsburgh, Pa., with Dr. Frank Billings and John G. Bowman, members. By October 15, 1922, a total of 2,121 of these beds had become available, including the hospital at Rutland, Mass., with a capacity of 220 beds, to be opened during the ensuing month. The completed program will provide 6,143 beds.

Program Under Second Langley Bill

The second Langley bill appropriated $17,000,000 for hospital facilities and the funds became available on May 11, 1922; these funds are to be expended under the direction of the Veterans' Bureau. The majority of the hospitals authorized under this program are for neuropsychiatric patients. The necessity for a special type of hospital for this class of cases has been apparent to the officials of the Veterans' Bureau ever since the direction of this program was placed under its control. It is expected that still further additional hospital facilities will have to be constructed for the disturbed psychotic cases before the problem of adequate care and treatment for disabled veterans suffering from neuropsychiatric disabilities has been solved. The following outline will show the progress made towards hospital construction under the second Langley bill, the sites selected and the type of hospital as well as the bed capacity of each institution.

In District No. 1, comprising the states of Maine, New Hampshire, Vermont, Massachusetts and Rhode Island, a 400 bed neuro-psychiatric hospital has been provided for at Northampton, Mass.

In District No. 2, comprising the states of New York, New Jersey and Connecticut, two tuberculosis hospitals have been provided for, one a 500 bed hospital at Tupper Lake, N. Y., and 450 beds for a White committee project at Chelsea, N. Y. The plans for the erection of the hospital at Chelsea are being handled by the supervising architect of the Treasury Department.

Corner of the physiotherapy clinic at Hospital No. 60, Oteen, N. C.

In District No. 5, comprising the states of North Carolina, South Carolina, Tennessee, Georgia and Florida, a 200 bed general hospital has been obtained by purchase at Memphis, Tenn. This hospital was opened on August 14 and is now receiving patients.

For District No. 6, which comprises the states of Alabama, Mississippi and Louisiana, a 275 bed neuro-psychiatric hospital has been provided for at Gulfport, Miss., in the state centennial exhibition group of buildings and plans are being prepared by the navy department for new construction up to 350 beds.

For District No. 7, which comprises the states of Indiana, Ohio and Kentucky, the War Department has completed plans for a 436 bed neuropsychiatric hospital at Chillicothe, Ohio.

To District No. 8, which comprises the states of Illinois, Michigan and Wisconsin, a 500 bed neuropsychiatric hospital has been allocated at Camp Custer, Mich. The War Department is now preparing plans for this project.

In District No. 9, which comprises the states of Nebraska, Iowa, Kansas and Missouri, two hospitals have been provided for: one, a 400 bed neuro-psychiatric hospital at Knoxville, Iowa, and the other a 125 bed tuberculosis hospital at Excelsior Springs, Mo. The Excelsior Springs hospital was purchased by the government, but not out of funds provided for by the second Langley bill.

To District No. 10, which comprises the states of Minnesota, North Dakota, South Dakota and Montana, a 250 bed neuropsychiatric hospital has been allocated at St. Cloud, Minn. The War Department is preparing these plans also and expects that they will be ready very soon.

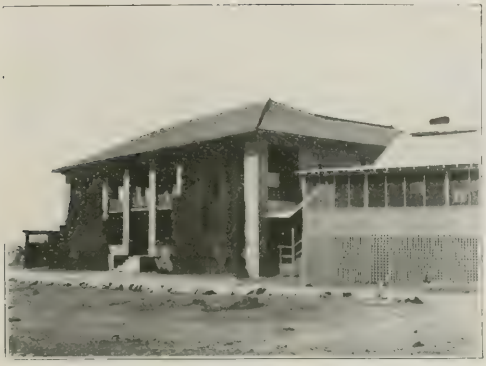
In District No. 12 comprising the states of Arizona, Nevada and California, a 406 bed tuberculosis hospital has been provided for at Livermore, Cal. Plans have been prepared by an architect in San Francisco.

The last project in this second Langley bill is a 250 bed neuro-psychiatric hospital at American Lake, Wash., for District No. 13 which comprises the states of Washington, Idaho and Oregon. Plans for this institution have been placed on the market for bids.

The plans outlined above have been definitely agreed upon, the sites have been definitely selected and there will be no delay incident to the completion of all of these projects. The hospitals provided under this bill will be completed hospitals in every sense of the word and, when finished, will be ready immediately for the reception and treatment of patients. The director has instructed the personnel charged with this work to spare no effort to make these hospitals the last word in hospital construction so that they will be able to provide for the World War veterans the very best medical care and treatment that medical science can afford. The beds provided by the second Langley Bill proper will be 3,887.

Will Abandon Contract Hospitals

The latest program of the government, as outlined by Col. Forbes, and the Federal Board of Hospitalization, is to provide hospitals of a permanent type of construction embodying the best facilities possible for the care and for the beginning of rehabilitation of disabled ex-service men, to have enough beds of this type at its dis-



Section of nurses' quarters (left) and a view of ambulant wards (right) at the U. S. Veterans' Hospital No. 55 at Fort Bayard, N. M. There are 1200 tuberculosis patients at this hospital.

posal so that contract institutions may be abandoned and to expand the dispensaries and outpatient clinics so that they can serve all those needing out-patient care. The U. S. Veterans' Bureau has been assured that each individual project will be rushed to completion and its facilities made available without any delay or hindrance.

There are some hospitals for the treatment of both tuberculosis and neuropsychiatric patients that are not of standard construction which will be discontinued by the bureau as soon as special hospitals of the permanent type of construction are completed. Also, there are other hospitals for the treatment of these cases which are not ideally located. There is, at present, as before stated, a shortage of satisfactory beds for the treatment of those suffering from neuropsychiatric disabilities, particularly of a disturbed nature (the frankly insane), but it is expected that the present program for the construction of the additional facilities enumerated will greatly relieve this situation.

In addition to the hospitals mentioned above, the 146 district and 140 sub-district offices of the bureau are authorized to attach to such offices complete dispensary facilities. These dispensaries have been installed in most of these offices and are rapidly being installed in the others, with regularly employed government physicians for every branch of medicine and surgery. At the present time, there are 117 complete dispensaries throughout the United States and space has been obtained and equipment is being forwarded to the remaining sub-district offices.

In each of the larger dispensaries there are complete clinics in surgery, orthopedic surgery, general medicine, tuberculosis, neuro-psychiatry, eye, ear, nose and throat diseases, urology and dentistry. As a part of these dispensaries, well equipped x-ray and clinical laboratories are established. In addition to these, a complete clinic in physiotherapy is in operation, affording patients the benefit of the best modern treatment in mechanotherapy, electrotherapy, hydrotherapy and massagotherapy. The smaller dispensaries, which are being established, provide similar facilities for the making of examinations but do not provide such complete arrangements for furnishing treatment.

Through these dispensaries it is intended as far as possible to obtain examinations and render treatment to dehospitalized beneficiaries and outpatients. This will obviate the necessity for referring a claimant to a local examiner for one examination and often requiring him to return a few days later for a special examination. It will enable the bureau to take advantage of the modern medical idea of group diagnosis, and to make a complete record of the case, not only of the disability but of the necessity for treatment, need of training, compensability, employability, etc. Besides the general examination, any special examination can be made through the specialists and consultants on duty at the dispensaries, and, in addition, any laboratory or x-ray study, physiotherapy or out-patient treatment can be promptly rendered and hospital treatment, when indicated, can be arranged at once without delay. The part-time services of over 600 eminent specialists are provided for the hospitals and dispensaries and the bureau also employs 414 social service or follow-up nurses in connection with this work.

Occupational Therapy and Vocational Training

The Veterans' hospitals differ from civil hospitals, in that they combine educational measures with therapy, with the object of curing both the physical and the economic disability and in that each hospital has a complete physiotherapy department while the special hospitals in addition

to their distinctive arrangements are completely equipped and staffed for general medical and surgical treatment.

When a patient ceases to be a bed case, after the necessary recreation has been prescribed, his educational and industrial background is surveyed and an estimate made of his mental ability; he is then consulted as to his vocational ambitions and his employment or job objective, and a detailed training program based on that objective, is determined on and begun. Every step is always under approval of medical advisers: after discharge from hospital the patient's occupational training is continued in schools or shops near his home.

Hospital training schools up to and including the eighth grade and numerous craft shops are staffed with teachers and technical instructors whose most earnest efforts are devoted to preventing false starts into the employment objective; often several training tests are needed before the final objective is found and these determine the school, trade or shop to which, after discharge from hospital, the man goes to continue his training.

During the fiscal year 1922, there was discharged for all reasons a total of approximately 58,313 patients from U. S. Veterans' and U. S. Marine Hospitals. Of this number 16,375 patients were suffering from tuberculosis; 8,192 from neuropsychiatric disorders, including endocrines; and 33,746 from general medical and surgical conditions.

There is shown below in Table I the percentage discharged by each general class of condition for each type of disposition.

It will however be seen that there are included in this table certain groups of discharges when the men left hospitals due to personal reasons, or were transferred to other hospitals, or were discharged, with no treatment being indicated, or when the condition on disposition was not shown. Of the total number of discharges, 21,346 occurred for the above enumerated reasons and with the exception of those cases which were discharged when the condition was not indicated these types represent discharges in which the hospitalization was not completed. The including of such figures does not produce a correct indication of the effectiveness of hospital treatment. In Table II, these types of discharge have been eliminated and the figures are confined to those cases which were discharged with the maximum benefit from hospitalization having been reached.

TABLE II.—CONDITION ON DISPOSITION OF PATIENTS DISCHARGED FROM U. S. VETERANS HOSPITALS AND U. S. MARINE HOSPITALS AFTER REACHING THE MAXIMUM BENEFIT FROM HOSPITALIZATION.

Percentage based on 36,967 cases discharged during fiscal year, 1922, classified as follows: T.B., 6,159; N.P., 5,013; Gen., 25,795.

Condition on Disposition	Total	T.B.	N.P.	General
Died	3.52	15.06	2.00	1.15
Improved or Recovered	74.17	59.07	71.87	78.22
Unimproved	14.24	18.10	21.38	11.93
To Out-Patient Office and Home Treatment	8.07	7.77	5.15	8.72
TOTAL	100.00	100.00	100.00	100.00

Tuberculosis Hospitals

The U. S. Veterans' Bureau is now operating thirteen tuberculosis hospitals all of which were transferred from the U. S. Public Health Service by executive order of April 29, 1922. These hospitals are in various parts of the United States and are used exclusively for the care of tuberculous patients. Temporary buildings are gradually being replaced by permanent construction.

The hospitals are operated largely by reserve officers of the U. S. Public Health Service, practically all of whom are ex-service men and many of whom are recognized tuberculosis specialists.

All modern methods of treatment are being employed, including rest, graduated exercises, pneumothorax treatment, occupational therapy and some physiotherapy.

Upon admission of the patient to the hospital he is placed in a receiving ward which is always

TABLE I.—PERCENTAGE DISTRIBUTION OF DISCHARGES FROM U. S. MARINE AND U. S. VETERANS HOSPITALS IN ACCORDANCE WITH CLASS OF DISPOSITION AND CONDITIONS ON DISPOSITION.

Based on 58,313 cases discharged throughout fiscal year 1922, classified as follows: T.B., 16,375; N.P., 8,192 (including endocrines); Gen., 33,746.

Disposition and Condition on Disposition	Total Cases		Tuberculous Cases		Neuro-Psychiatric Cases		General Cases	
Discharged: No treatment indicated or condition on Discharge not given	6.84		3.48		5.36		8.83	
Discharged: Maximum hospitalization reached	63.40		37.61		61.20		76.44	
Died		2.23		5.67		0.98		0.86
Recovered or Improved*		47.02		22.21		43.98		59.79
Unimproved		9.03		6.81		13.09		9.12
To Out-patient Office or Home Treatment		5.12		2.92		3.15		6.67
Transferred to other Hospitals	11.86		20.30		20.21		5.74	
Discharged for Personal Reasons (Hospitalization not completed)	17.90		38.61		13.23		8.99	
Against Advice		7.40		19.18		3.41		2.65
Absent Without Official Leave		9.25		17.00		8.47		5.69
Disciplinary		1.25		2.43		1.35		0.65
Total	100.00		100.00		100.00		100.00	

*For tuberculosis "apparently arrested or improved."

Keeping fit while undergoing rehabilitation at U. S. Veterans' Hospital No. 84, Algiers, La., a 200 bed general hospital

in charge of a physician of recognized ability in the diagnosis of disease. The patient is immediately put to bed for a sufficient length of time to make an accurate diagnosis. A careful study of the patient determines the degree of his tuberculous disability as well as his bodily resistance to the disease. All modern laboratory and x-ray findings are used to assist in the diagnosis. The recognition of intercurrent and contagious diseases also is made possible in the receiving ward, and appropriate treatment is arranged. Sometimes a non-tuberculous patient is admitted to the hospital in error but, in the receiving ward, the correct diagnosis is made and the patient is discharged or transferred to a hospital suitable for his disability; thus the non-tuberculous are prevented from being treated in a tuberculosis institution.

The regulations governing tuberculosis hospitals of the bureau have been approved by the National Tuberculosis Association and do not differ materially from those adopted by all recognized civilian and government institutions.

A special course of instruction for physicians and nurses in the diagnosis and treatment of tuberculosis at U. S. Veterans' Hospital No. 60, Oteen, N. C., has just been brought to a successful close. Thirty physicians and twenty-eight nurses selected from government hospitals and examination centers east of the Mississippi river made up this school which covered a period of thirty days' intensive training. Regular schools of instruction are being arranged in order that the tuberculosis hospitals operated by the bureau may have an efficient medical personnel especially qualified in the diagnosis and treatment of this disease.

In conferences with the chiefs of the neuropsychiatric sections of the eighth, ninth and sixth districts and with the medical officers of the various hospitals in these districts, we have endeavored to discover the principal difficulties to be met in the adequate study and treatment of neuropsychiatric beneficiaries and the causes which lead to the hospitalization of psychoneurotics and constitutional psychopathic states in spite of the fairly general agreement that such a step is, medically, not necessary or advisable. Some of the difficulties learned appear, under present conditions, to have very definite weight while others are not convincing.

It has been difficult to secure figures which indicate the relative sizes of the different groups of neuropsychiatric cases but the following tables may be used for the purpose. It must be stated, however, that the diagnoses of cases in the ninth district would probably be somewhat modified by more intensive study.

TABLE I.—GROUPING OF 6436 CASES (INITIAL DIAGNOSES) IN DISTRICT NO. 9.

	Mo.	Nebr.	Ia.	Kan.	Total	Percentage
Psycho-neurosis	1150	267	848	463	2728	42.4
Psychosis	434	95	288	171	988	15.4
Psychopathic personal	123	24	25	17	189	2.9
Epilepsy	113	32	44	39	228	3.5
Mental deficiency	16	1	8	9	34	0.5
Organic nervous dis.	275	37	138	86	540	8.5
Miscellaneous	286	199	434	204	1723	26.8
Total	2397	655	1785	999	6430	100.0

Under the heading "Miscellaneous" are included cases in which the diagnosis is of some condition not strictly belonging in the neuropsychiatric field but in which, in all probability, there were psychoneurotic manifestations.

TABLE II.—DIAGNOSES IN 353 CASES ADMITTED TO HOSPITAL.

	Per cent
Psycho-neurosis	37.5
Psychosis	13.3
Psychopathic personality	1.7
Epilepsy	10.8
Mental deficiency	0.9
Organic nervous disease	16.8

From the foregoing tables it is obvious that the number of beds needed for the treatment of neuropsychiatric beneficiaries is very largely dependent upon the successful solution of the problems presented by adequate treatment outside a hospital. The only group requiring hospitalization for most examples is that of the psychoses. Many cases of organic nervous disease may require treatment in hospitals but this can be provided in any well equipped general hospital. In some instances it may be necessary to place patients belonging in other groups in a hospital for a short period of study but not for prolonged treatment.

Cost of Operation of Veterans' Hospitals

During the fiscal year ended June 30, 1922, the total cost of operating U. S. Veterans' Hospitals was $23,530,916.14. During the fiscal period there was rendered a total of 4,966,403 in-patient days of relief, resulting in an average per diem cost per patient throughout the year of $4.74.

This total operating cost is not the gross cost for the maintenance and upkeep of hospitals, but represents the net cost of operation and excludes the cost of all major repairs and alterations and the cost of non-expendable equipment and supplies. These items being considered capital expenditures are not a part of operation cost.

There is given below a recapitulation of the cost of hospital operation showing the amount and the per diem rate per patient for the several classified hospital departments. This report of operating cost applies only to hospitals under the direct jurisdiction and control of the Veterans' Bureau.

CONDENSED STATEMENT SHOWING OPERATING EXPENSES AND PER DIEM COSTS U. S. VETERANS' HOSPITALS BY UNIT OF EXPENSE FISCAL YEAR 1922.

No.	Department	Grand Total	Per Diem
1.	Medical and Surgical	$3,758,219.73	$0.75
2.	Dental Service	265,626.23	.06
3.	Nursing Service	1,408,041.79	.28
4.	Reconstruction	607,430.83	.12
5.	X-ray Service	260,398.00	.05
6.	Clinical Laboratory	234,311.93	.05
7.	Department of Dietetics	7,990,822.08	1.62
8.	Farms Operation	114,646.07	.02
9.	Motor Vehicles	552,684.37	.11
10.	Laundry Service	783,514.34	.16
11.	Administrative	1,546,108.32	.32
12.	Indirect Cost of Supplies	776,241.97	.14
13.	Maintenance of Buildings and Grounds	1,499,321.63	.30
14.	GENERAL EXPENSES:		
	(a) Stable	7,619.05	...
	(b) Fuel	806,310.65	.16
	(c) Light	216,583.48	.04
	(d) Water	145,106.96	.03
	(e) Rent	935,832.24	.19
	(f) Miscellaneous	1,283,878.19	.26
15.	Anti-malaria measures	6,714.10	...
16.	Bakery and Milk	23,302.64	.01
17.	Dairy Farms	161.98	...
18.	OUT-PATIENT SERVICE	307,534.56	.06
	TOTAL OPERATING EXPENSES	$23,530,916.14	$4.74
	Number of in-patient days	4,966,403	

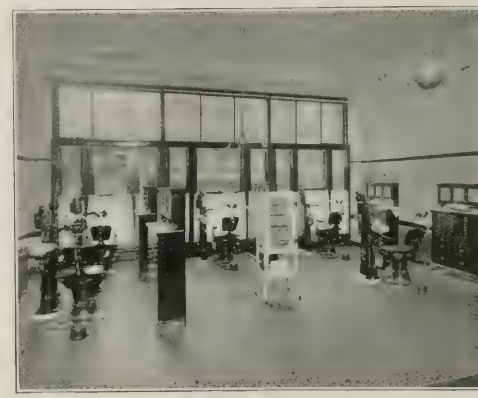
The hospital population of the U. S. Veterans' Bureau on November 2, 1922, was divided as follows: tuberculosis patients, 10,316; neuro-psychiatric patients, 8,843; general medical and surgical patients, 6,038; 17,559 of the aforementioned cases were hospitalized in 78 government institutions, 48 of them veterans hospitals, and 7,581 were hospitalized in 1300 contract or civil hospitals. The total hospital population has decreased

Clinical laboratory at U. S. Veterans' Hospital No. 52, Boise, Ida., a 215 bed general hospital. All hospitals of the Veterans' Bureau are similarly equipped.

since January, 1922 by five thousand. Throughout the fiscal year, 1922, there were admitted to all hospitals a total of 134,354 patients for all disabilities, and there were furnished by all hospital facilities a total of approximately 10,161,500 patient days of treatment. In the entire medical work of the bureau 11,728 doctors and dentists and 1,600 nurses are employed: 2,578 of the doctors and 5,288 of the dentists are on a fee basis. These figures will indicate what the hospitalization and medical problem really is and some of the steps which have been taken to meet it.

Care of the Patients

It has been said that the government has just started thinking on advanced hospital ideas and what they mean to the patient and to the public. The Veterans' Bureau now realizes that a hospital is not merely a brick or marble container for sick people but is an affair of human energy, brains,



Dental clinic at Veterans' dispensary U. S. Veterans' Bureau, San Francisco, Cal.

and harmony of action devoted not only to the cure of a patient's physical and mental ailments but to the cure of his resulting economical disability as well. The real hospital follows its patients after they are discharged and thereby reaches out into the community to prevent the need of hospitalization. A hospital can prove that it is a better service to keep the need of hospital care from a man than to provide it when needed.

The Bureau hopes to have in operation before the end of the fiscal year a standardization of medical care and treatment through the application of the fundamental principles of research embodied in the "minimum standard" of treatment which has been endorsed by the board of hospitalization and by the director of the bureau.

The standard consists of a working arrangement by which these principles of research are applied daily in the hospital for the benefit of each patient. Accurate, adequate case records, findings of modern laboratory equipment, manned by skilled technicians, are but provisions to marshal the facts before the physician for examination. The clinical staff meetings are but an opportunity to test out the data which the records and laboratories have furnished. Insistence on competent and conscientious clinicians is but a guarantee that the interpreters of the facts regarding each patient are skilled medical men, on whose judgment the public and its government have every right to rely.

In essence the standard aimed at is an arrangement by which a hospital can insure its patients the best care known to the science of medicine, an application of the principles of scientific research to the care of each patient; a system of diagnosis and treatment in which there is no competition between medicine and surgery and administration, a system in which surgery becomes merely the mechanics of therapy.

The policy of the U. S. Veterans' Bureau is aptly expressed in the recent communication of Col. Charles R. Forbes, the director, addressed to Col. Alvin M. Owsley, national commander of the American Legion, which states in part:

"Money spent on hospitals is for the cure of patients. The relative efficiency of the treatment of any disease by different methods can be estimated. Annual reports should take pride in the high percentage of patients benefitted instead of the number treated, nursing days and the per capita cost, etc.

If by inefficient treatment patients benefit only 80 per cent when they should have benefitted 90 per cent, the loss is worse than if the administrator wasted 10 per cent of the hospital's income.

An unnecessary death, an avoidable failure of an operation or any treatment is a waste product. Administrators who do not report results of treatment do not audit their accounts. They should no more be allowed to give away death and disability to patients than to steal the hospital funds.

From beginning to end hospital standardization is the making of a reality out of an ideal. It is a high spirited, clear-headed, dead-in-earnest effort on the part of all concerned to call themselves to their own best senses.

Stressing only the broad fundamentals, a minimum standard molds itself to meet specific needs, nowhere impeding initiative or fettering judgment. Rightly conceived and carried out, it makes the hospital the proved guardian of disabled veterans and the public health, rendering service to all."

Analysis of Hospital Patients as to Payment

	Private Patients	Ward Paying (Many Pay Only in Part)	Public Charges	Paying Nothing	Total
1911	18814 - 20%	16510 - 18%	21184 - 23%	37599 - 39%	94,107
1912	22180 - 20%	19031 - 19%	20636 - 21%	43772 - 40%	105,669
1913	25253 - 22%	23545 - 21%	23443 - 21%	41195 - 36%	113,536
1914	26348 - 22%	25168 - 21%	28388 - 23%	41086 - 34%	120,990
1915	26561 - 20%	31140 - 24%	32130 - 24%	42784 - 32%	132,615
1916	30384 - 22%	33433 - 25%	31855 - 23%	40741 - 30%	136,412
1917	31477 - 21%	47343 - 31%	30847 - 20%	41988 - 28%	151,655
1918	31732 - 22%	52089 - 35%	29245 - 20%	34356 - 23%	147,422
1919	36283 - 24%	56279 - 38%	23255 - 16%	32712 - 22%	148,529
1920	37872 - 25%	63832 - 42%	21508 - 14%	28810 - 19%	152,022
1921	35902 - 23%	71422 - 45%	17670 - 11%	33727 - 21%	158,721

This chart, which forms a part of the recent annual report of the United Hospital Fund of New York, refers to the forty-six Hospitals in Manhattan and the Bronx that belong to the United Hospital Fund. Note the great increase of ward paying patients from 16,510, or 18 per cent, in 1911, to 71,422, or 45 per cent, of the total patients in 1921. High costs forced the hospitals to be less liberal in free service. High wages also enabled more people to pay, if only in part.

PRESIDENTS OF SEVERAL HOSPITAL AND ALLIED ASSOCIATIONS

Asa S. Bacon (upper left), American Hospital Association; Dr. Harvey Cushing (upper right), American College of Surgeons; Dr. Frank Billings (center), American Conference on Hospital Service; Rev. Fr. C. B. Moulinier (lower left), Catholic Hospital Association of the United States and Canada; Dr. C. S. Woods (lower right), Protestant Hospital Association.

OCCUPATIONAL THERAPY IN 1922

By T. B. KIDNER, President, American Occupational Therapy Association, New York.

IT is said that the proper thing in journalism today is to tell the story in your first paragraph; therefore, in a review of occupational therapy during the past year, it may be said at the outset that it has been a year of remarkable progress and growth.

This has been exemplified not only in the increase in the number of hospitals in which occupational therapy is being used in the treatment of patients, but in the attention being given to it today in many quarters where hitherto it has been but little regarded. For example, the secretary-treasurer of the American Occupational Therapy Association, Mrs. Eleanor Clarke Slagle, in her report at the annual meeting in Atlantic City, told of the inquiries received from this country and abroad and in particular, spoke of a Japanese surgeon who came seeking information. "I want to learn about Occupational Therapy," said he, "because it is the beginning of vocational re-education." The doctor was an industrial physician in charge of the medical work in a large Japanese manufacturing company, which has applied welfare work in its problems of employment, and proposes to reeducate its disabled employes.

Relation to Post-Hospital Life

There is perhaps no more interesting phase of occupational therapy at the present moment than its relation to the post-hospital life of the patient. Of course, occupational therapy workers have from the earliest beginnings kept in mind for certain cases, not only the immediate therapeutic value of the work in restoring functions of the body or the mind, but also its possible value from a vocational point of view after the patient leaves the hospital. Training in some occupation given primarily as treatment during the patient's stay in the institution has often proved to have industrial value after the patient is discharged. It remained, however, for the work in the World War hospitals to emphasize fully the value from a purely therapeutic standpoint of relating occupational therapy to the post-hospital life of the patient to the fullest extent possible. In practice in the army hospitals, it developed that if several varieties of occupation available in the hospital shops or classes would have equal value for therapeutic purposes in a given case, but one was more valuable than others from the standpoint of future use in the man's post-hospital life, that one would be prescribed.

This is a point of exceeding importance to occupational therapists, since the Industrial Rehabilitation Act passed by the Congress in June, 1920 is functioning well in a large number of states. Persons disabled in industry by accident or illness and handicapped in their former occupations as the result of the accident or illness are being given vocational training at the joint expense of the federal and state governments, for the purpose of reeducating them in some occupation in which they can be efficient despite their physical handicap.

The working out of schemes under this beneficent act has already had a direct effect on occupational therapy. Many hospitals are introducing it as a result of suggestions and requests from those charged with the local administration of its provisions. Experience has shown that the problem of vocational reeducation of a patient is much more difficult after a prolonged period of idleness in a hospital; therefore, it has become an axiom that vocational reeducation should commence as soon as possible after a man's accident or other disablement.

Must be Closely Related to Industry

The effect of this upon occupational therapy is bound to be great. Already occupational therapists in different parts of the country are being called upon to help, and it seems to be inevitable that the therapeutic work in the hospitals will have to be related more and more to industry and gainful occupation, as experience accumulates to guide and direct it. The process of rehabilitation of disabled persons cannot be divided into compartments, but must be a continuous process. The tremendous growth and success of industrial surgery and medicine in this country in recent years has meant that the doctor has had to study industries widely and intensively. In a similar way, occupational therapists must broaden the scope of their knowledge of industry and occupations by every means possible.

One of the most significant developments during the past year was that, for the first time in its history, the American Occupational Therapy Association held its annual meeting in conjunction with the meetings of the American Hospital Association, and that its exhibits formed an integral part of the general hospital exhibits. Meetings of the American Occupational Therapy Association were open to and were attended by many members of the American Hospital Association.

and the occupational therapy exhibits probably attracted more attention than the commercial and general exhibits.

Sixty-seven hospitals of various types and capacities were represented and both in variety and quality the exhibits showed an advance beyond those of former years.

An analysis of the types of hospitals which sent exhibits revealed the interesting fact that more than half were institutions devoted to the care of tuberculosis patients. Hospitals for nervous and mental cases came next, and orthopedic and general hospitals were fewest in number. In considering this, it must be remembered that, in the actual number of patients represented, the neuro-psychiatric hospitals were probably first, as many of the tuberculosis sanatoriums which sent exhibits were comparatively small institutions.

War Brought Wider Recognition to O. T.

It seems fair to conclude that the more general adoption of occupational therapy in tuberculosis sanatoriums is a direct outcome of the experience of its value in army hospitals. Before the World War, the institutions for the care and treatment of the tuberculous in the United States which provided organized occupational therapy for their patients could probably have been counted on one's fingers. The attention given to the vocational rehabilitation of the disabled soldiers from the World War undoubtedly gave a tremendous impetus to occupational therapy on account of its possibilities as a preliminary to vocational training, and thus led many physicians to a realization of its value as a therapeutic measure in the treatment of tuberculosis, as well as in other diseases and injuries.

While it can scarcely be claimed that the increased use of occupational therapy in neuro-psychiatric hospitals is due to the example of army or other federal government hospitals, the fact remains that its use is on the increase in hospitals devoted to the treatment of mental and nervous diseases. In addition to the general excellence of the workmanship of the exhibits from hospitals dealing with mental and nervous cases, two features stood out: first, the large use made in the crafts work of what would otherwise have been waste materials; and, second, the evidence of the careful study of each case as shown by the case records.

The illustrated case records from some of the neuro-psychiatric hospitals, which were a prominent feature of the exhibits at Atlantic City, were a revelation to many members and visitors who were unaware of, or but imperfectly acquainted with the tremendous possibilities of occupational therapy for mental and nervous cases.

It is a disappointment to record that the "carry over" to civilian orthopedic hospitals from the fine work of the army hospitals in physical reeducation by means of curative work seems to have been remarkably small, although in no field of medical treatment are the results more patent to an observer. While in all types of institutions for the sick and disabled the American Occupational Therapy Association and its members must continue to urge and encourage the further adoption of occupational therapy, it is evident that special efforts should be made to spread a knowledge of its benefits and value in orthopedic hospitals.

In general hospitals another large field is almost untouched. Reference has already been made to the fact that the Federal Industrial Rehabilitation Act is functioning in many states and if its full benefits are to be obtained, every general hospital dealing with industrial accidents or illnesses must adopt occupational therapy as a part of the treatment provided.

Another exceedingly interesting feature was the fact that two sessions of the meetings of the American Occupational Therapy Association were required to receive reports of the work in the various states. Some of these reports were made by state and local associations which now number nine in the United States and two (provincial) in Canada; others being in process of formation. Very few states reported that occupational therapy is not in use in the hospitals within their borders. A great many states, however, reported that the work was hampered because of the lack of trained personnel, which is a matter of considerable moment at present. There are nine training schools in the United States and a number of hospitals are also training aides in a small way. The demand, however, exceeds the supply, especially in the field of mental hospitals, and it seems as if it will be necessary for state hospital authorities to provided courses of training for occupational therapists, just as courses have long been provided for nurses in state hospitals.

The American Occupational Therapy Association has been studying the question of standards of training and, in response to many requests, it is probable that the association will promulgate minimum standards of training and qualifications in the near future.

Another feature which requires attention is a standardization of the various forms for prescriptions, records and reports. Much good work has been done in individual states and hospitals in this direction, and from this experience it

should not be difficult to devise forms which will be generally acceptable throughout the country.

One of the important developments during the past year was the publication of the first numbers of the "Archives of Occupational Therapy." Under its able editor-in-chief, Dr. W. R. Dunton, Jr., of Sheppard and Enoch Pratt Hospital, Towson, Md., assisted by an international board representing nine different countries, five numbers (bi-monthly) have appeared. The publishers report that the journal has already attained a good circulation and its sponsors believe that it will have an increasing field of usefulness.

No review of occupational therapy work in the United States during the past year would be complete without a reference—and an appreciative one—to the work in the government hospitals devoted to the care and treatment of ex-service men. Very early in the year a definite step in advance was taken by the U. S. Veterans' Bureau when it was decided that all occupational therapy in the hospitals under the bureau should be under the medical department. Previously, some of the curative work had been done by the vocational rehabilitation branch of the bureau, (formerly the Federal Board for Vocational Education) which is charged, of course, with the subsequent training for some new occupation of those men whose disability prevents them returning to the occupations followed by them before the war. All occupational therapy in the hospitals maintained by the Veterans' Bureau is now under one head, a physician, who is responsible to the medical director for the conduct of the work.

The bureau also provides occupational therapy for its beneficiaries in "contract hospitals," under the same general organization. Mention must be made in this connection of the excellent *Circulars of Instructions* issued from time to time by the bureau, for the information of physicians and therapists in its employ. Alike in statements of principles and directions for practice, these circulars have been very valuable.

The group of hospitals under the board of managers of the National Home for Disabled Volunteer Soldiers ("Soldiers' Homes") has also organized occupational therapy under one director, who is responsible to the board through the chief surgeon. The board has also provided in the new hospitals being erected at the branch homes at Dayton, Ohio, and Milwaukee, Wis., quarters for occupational therapy, (and for recreation) which will be unsurpassed anywhere. Well-lighted and airy classrooms, spacious craft shops, convenient rest rooms, generous space for storage and administration, characterize the plans developed for these hospitals.

As in the civilian hospitals, the work in the government institutions has been considerably hampered by the shortage of trained, qualified personnel. Notwithstanding this (and other drawbacks), however, excellent work is being done and much progress has been made towards raising the standards of the work to the highest degree possible.

The past year has been full of encouragement and a cause for thankfulness in many ways. Occupational therapists are sometimes charged with being over-enthusiastic, but as the years go by and the curative value of work proves itself more and more, the enthusiastic pioneers may, we believe, look forward confidently to a general recognition of their belief that occupational therapy has made an important contribution to the age-old problem of the cure of disease and the alleviation of suffering.

NEW HEAD OF ARMY NURSE CORPS

The secretary of the navy has accepted the resignation of Mrs. Lenah S. Higbee, as superintendent of the Navy Nurse Corps. Mrs. Higbee has served continuously in the capacity of nurse, chief nurse and superintendent since the Nurse Corps was established in 1908. Mrs. Higbee has desired for some time past to take up other work and for this reason her request has been approved.

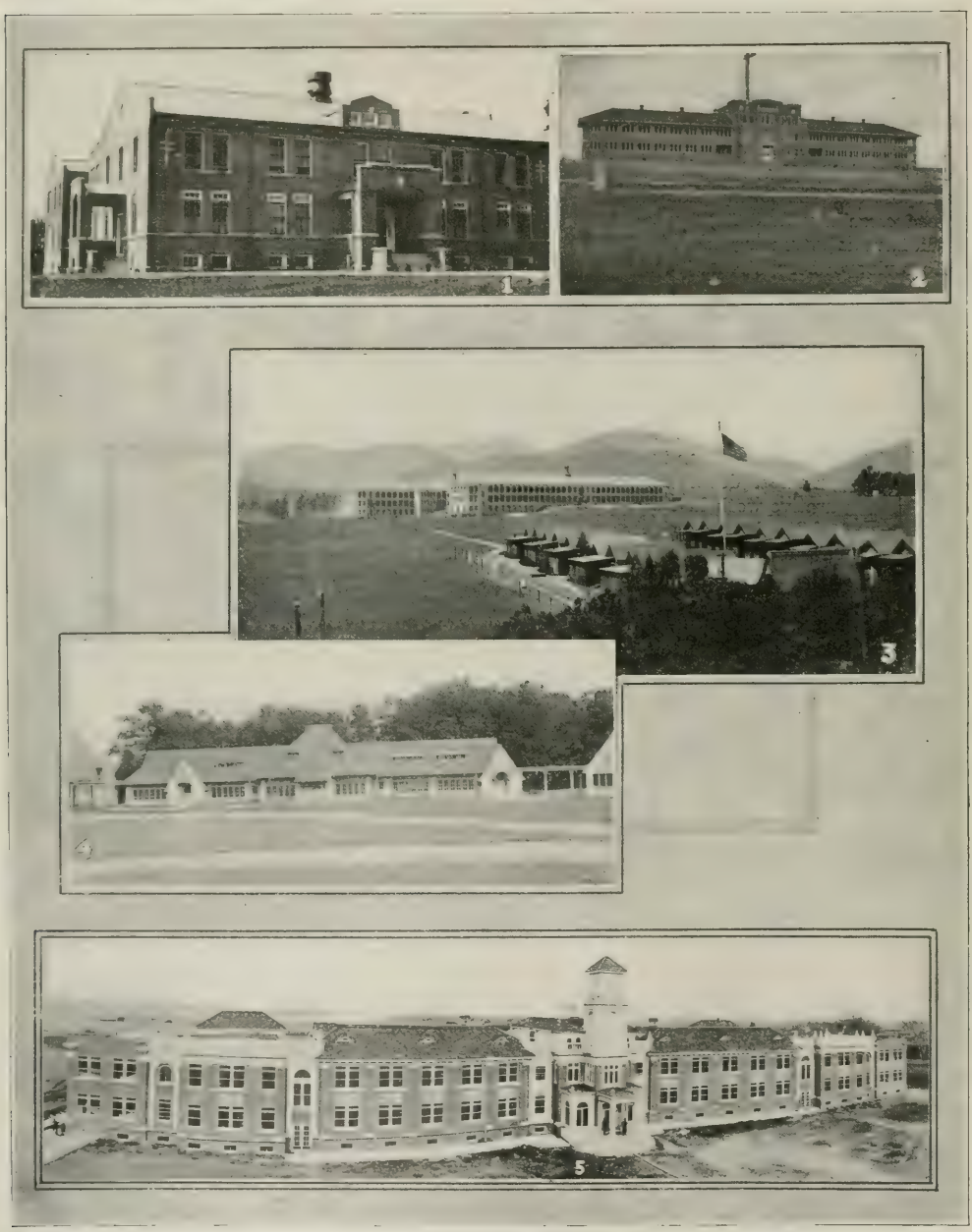
Upon the recommendation of Surgeon General Stitt the secretary of the navy appointed Miss J. Beatrice Bowman to be superintendent of the Navy Nurse Corps, her duties beginning Dec. 1, 1922. Miss Bowman was born in Iowa and was educated in that state. She received her professional education from the Training School of the Medico-Chirurgical Hospital of Philadelphia from which she was graduated in 1904. She is also a registered nurse of the state of Pennsylvania and practiced in private duty for five years; in the spring of 1908 she rendered excellent service with the Red Cross following the disaster in Mississippi.

In the early fall of 1908 she was one of the first class (which numbered only twenty) who was able successfully to pass the rigid examination for appointment in the Navy Nurse Corps. Her promotion to the grade of chief nurse was effective Feb. 23, 1911.

Miss Bowman was temporarily released from the Navy Nurse Corps to be the supervisor of one of the Nurse Units sent to England on the "Red Cross Ship" in September, 1914. She successfully completed this service and in 1915 she returned to her position of chief nurse in the U. S. Navy and has served continuously at various stations and hospitals with uniform efficiency.

It is doubtful if any condition overseas called for greater executive and nursing ability than that required of the chief nurse of the large naval hospitals in the United States during the war period and following the armistice. Perhaps Miss Bowman's most conspicuous service in the Navy was that which she gave as chief nurse of the Naval Hospital, Great Lakes, during the years 1918-1920. Miss Bowman's recent assignment was chief nurse of the U. S. S. Relief (hospital ship) from which duty she was ordered to the Bureau of Medicine and Surgery for a preparatory course in her work as superintendent.

FIVE OF THE MANY TUBERCULOSIS SANATORIUMS OPENED IN 1922



1. New Building at State Sanatorium for Treatment of Tuberculosis, Oakdale, Iowa; 2. Delta Menominee Sanatorium, Powers, Mich.; 3. New Tuberculosis Barracks, National Home for Disabled Soldiers, Pacific Branch, Sawtelle, Cal.; 4. One of the buildings of the Detroit Municipal Tuberculosis Sanatorium, Northville, Mich.; 5. Sanatorium of the Jewish Consumptives Relief Society, Edgewater, Colo.

WHITTLING AT THE TUBERCULOSIS DEATH RATE

By PHILIP P. JACOBS, Ph. D., Publicity Director, National Tuberculosis Association, New York.

MARK TWAIN tells the story of a man who was accustomed to sit day after day in front of a country store whittling at a pine stick and who, when asked what he was making, always replied, "Just whittlin'." There are folks who seem to think that the campaign against tuberculosis is somewhat like Mark Twain's friend —that it has aimlessly progressed without any real goal, and that its development might be epitomized in the phrase "just whittlin'." I take issue with such folks. To be sure, like every great movement, whether in health, or religion, or politics, or business, the campaign against tuberculosis has had its opportunistic phases. Its leaders have had to seize upon those entering wedges that have given a path of least resistance. Nevertheless, in the last twenty years there has been a steady and determined aim which may best be stated thus:—the development of community consciousness to that point where the people as a whole will provide the health machinery necessary for the control of tuberculosis. This is not "just whittlin' "; it is driving ahead with a determined goal and ideal in view.

The best available statistics for the year 1921 clearly indicate that the death rate from tuberculosis has been cut in half since the National Tuberculosis Association opened its office in January, 1905. Stated otherwise, this means that in the year of our Lord, 1922, if the same death rate were prevailing that did prevail in 1904, there would be 100,000 more deaths from tuberculosis than will actually be the case this year.

To state in a few pages what has been accomplished in the attainment of this goal even in one year is not possible, nor probably is it practicable considering the average impatient reader. An article of this character can sketch merely a few of the highlights of work done during the last year.

Relationship with International Agencies

The development of a more cordial relationship with the other national health agencies in this country and with international agencies has been one outstanding feature of the year's work. From the point of view of one of the individual members of the National Health Council, it is still difficult to say what have been the financial gains achieved through that body. It is certain, however, that the gain in better understanding that comes inevitably from working together and living together is one which, while it cannot be measured in dollars and cents, is of incalculable benefit. One might say the same thing of the development of relations between the National Association and the International Union against Tuberculosis. The business man might find it difficult to justify any considerable expenditure of money in the promotion of international tuberculosis relations. It is unquestionably true, however, that the National Tuberculosis Association and its affiliated organizations have just as much to gain from the promotion of such cordial relations as have the foreign organizations.

This last year has also been one of binding into a more coherent whole the state associations with the national association. The agitation of the last three years particularly has been productive in bringing the national and state associations as well as the national and local associations into a closer working relationship than at any previous stage in the history of the tuberculosis movement. The state associations now definitely become the distributing selling centers of the national association. They also become in a real sense the association itself. While the national association is not a federation of state associations, it is more and more becoming the servant and leader of the state associations.

Progress in Modern Health Crusade

In the field of education, probably the most significant achievement of the year has been the increased effort toward standardizing the Modern Health Crusade movement. The work of the committees in this direction has been of signal significance. The Modern Health Crusade is now at that stage of development where it can and should be sold as a basis for a system of health education to the different state departments of education. Realizing this possibility the national association with the help of the state organizations is reducing the essence of the Crusade to a teaching syllabus which in turn will, it is hoped, become the basis of education in personal hygiene and health habit-forming instruction.

The announcement by the Milbank Fund in May of its entrance into the field of tuberculosis demonstration is an outstanding feature of the year's development. Most of the income from this fund of $10,000,000 is now available for the conduct of a series of tuberculosis demonstrations in New York state, the first of which is about to be inaugurated. Framingham has accomplished no more significant result than this, that it has stim-

ulated another series of demonstrations of a similar character. These Milbank Fund demonstrations will in turn answer the many questions that Framingham, because of its restricted area, could not answer and will prove conclusively to the American municipalities whether tuberculosis can or cannot be controlled, provided sufficient funds are available for the purpose.

Vocational Guidance of Discharged Patients

In the field of hospital and sanatorium development, which is no doubt of most interest to readers of THE MODERN HOSPITAL, a number of significant steps have been developed and furthered during the last year. The practical completion of the location of the series of government hospitals for tuberculosis is significant. The National Tuberculosis Association has had an important part in the working out of this program. Of more significance, however, is the emphasis that is being laid with continuing stress upon the need for special facilities for the teaching of occupational therapy and the further development of vocational guidance for discharged patients. The follow-up studies of sanatoriums and hospitals throughout the country coupled with the experience of English studies of a similar character have clearly brought out the fact that unless the sanatoriums and hospitals of this country do something more for their patients than merely to restore them to a modicum of health, they are not fulfilling their purpose. The great outstanding need that is being felt throughout the country is for institutional facilities that will meet the special handicaps that tuberculosis produces. This means vocational analysis and the provision of special machinery developed out of this analysis. Many sanatoriums are feeling their way, blindly in some cases, but without doubt striving toward a desirable goal. The beginning of a study of industrial health hazards with particular reference to tuberculosis by the National Tuberculosis Association is one step in the right direction. Probably more significant, however, is the establishment of the Ida Potts Memorial at Hudson, N. Y., which it is hoped will be the nucleus of a great industrial and vocational colony for arrested cases of tuberculosis emulating and developing further the ideals of Varrier-Jones at Papworth Village in England.

Increased Emphasis on Home Treatment

Another new development in the tuberculosis hospital field has been the increased emphasis laid upon the need for home treatment. The National Tuberculosis Association has worked out a standard plan known as the "sanatorium home treatment plan" which is being adopted by governmental and other agencies. It is still too early to tell what will be the results of that plan, but it again is a step in the right direction. There will never be beds to care for all consumptives and even if there were, it is doubtful if all consumptives should be hospitalized for any length of time. A system of home treatment is desirable. Whether that system shall follow the proven lines of the home hospital demonstration of the New York Association for Improving the Condition of the Poor, or the tuberculosis class treatment method of Pratt in Boston, or the unit system as devised by the national association and approved by the American Sanatorium Association, is not possible of prognostication at this time. All of these plans have their merits and probably all of them should be encouraged.

Problem in Indigent Migratory Consumption

Still another phase of the hospital development has been the increasing stress laid upon the indigent migratory consumptive problem, particularly as it relates to the southwest. The studies of the National Tuberculosis Association soon to be published show clearly that this is not so much a problem of eastern cities as it was at one time supposed. It is almost exclusively a problem of the climatic resorts. Within the last year a number of states, notably Ohio, Indiana, Illinois and Iowa, have developed definite educational campaigns urging citizens who have tuberculosis to get well in their own states. If with this educational effort expanded to cover all of the eastern and other non-resort states there would go a conscientious, honest effort on the part of the climatic states not to boost climate willy-nilly, the problem of the indigent migratory consumptive would soon be solved. The unfortunate feature in this problem is that southwestern states do continue to urge that climate is the sine qua non of treatment. So long as some of them advertise as they do that climate cures tuberculosis, there seems to be little hope that the indigent migratory consumptive problem will be solved.

To speak of all the rest of the program of the national, state and local tuberculosis associations in the development of the Christmas Seal Sale, the promotion of facilities for better health education, the urging upon state and municipal governments the necessity for better official health machinery, the building of hospitals, the securing of nurses, the establishment of open-air schools, and so on, would be a task quite out of the range of this brief review. All of these things, however, have had their share in contributing to the steady whittling down of the tuberculosis death rate.

DISPENSARY PROGRESS IN 1922

By MICHAEL M. DAVIS, Jr., Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund, City of New York.

ONE hundred and thirty-six years ago our fathers brought forth in the city of Philadelphia a new institution, the Philadelphia Dispensary, the first of its kind on this continent. A beautiful little colonial building on Independence Square has been occupied by this "medical charity" for over a century.

During the year 1922, the taking over of the Philadelphia Dispensary by the Pennsylvania Hospital marks not only the termination of the independent existence of one of the oldest medical institutions of the western hemisphere, but also indicates the trend of the present time towards the intimate affiliation of dispensary with hospital and the assumption by hospitals of broader community relationships. This transition is not in organization merely. It marks a change in the attitude of medical work generally.

A visit to the Philadelphia Dispensary a few years ago revealed it as typical of that old type of work which made the name dispensary appropriate, the chief function being the giving out of medicine, patients passing rapidly by a physician, getting sometimes a little advice, sometimes a little examination, and almost every time a prescription. Before the close of 1923 when the new relationship to the Pennsylvania Hospital will have had time to show results, a survey of this dispensary's work should present a contrast that would mark the difference between the old and the new.

The Cornell Pay Clinic

No review of dispensary progress during 1922 could fail to mention the outstanding development of the Cornell Pay Clinic. Cornell University Medical College, one of the leading teaching institutions of the country, reorganized its long established dispensary in the autumn of 1921, and on the first of November of that year started its dispensary on the new scheme of a pay clinic. Fees of a dollar a visit were charged patients, with additional fees approximating cost for medicine, x-rays, unusual laboratory tests, etc.; the clinic physicians were placed on salary. The clinic continued to be used as a teaching clinic for medical students. The response from the public of New York was overwhelming, hundreds being turned away during the opening days. Twenty-two thousand five hundred and thirty-six different individuals were treated as patients during the first twelve months of the clinic, closing October 31, 1922, and fully six thousand applicants have been referred elsewhere.

Standards for the social-economic classification of patients were established after careful study and expert advice from economists and statisticians. The admission system of the clinic includes a tactful but definite inquiry of each prospective patient. From the standpoint of administration, perhaps the most interesting feature of the Pay Clinic is its control of intake. From the beginning the number of patients admitted to any department during the clinic session was strictly limited to the number which the physicians available could treat adequately during that time. These quotas were estimated in advance and were adjusted in each department during the year, as experience showed to be necessary. This involves a definite appointment system for all patients.

The medical faculty of Cornell at the close of the first year of the clinic states in its report that a greatly improved service to patients has resulted in the Pay Clinic, with improved opportunities also for teaching and for scientific study.

Financially, the current expenses of the first year amounted to $231,875.00, an average cost of $2.03 per visit from the 114,108 visits received. The income from patients' fees was $179,685.00, leaving a deficit of $45,791.55, but it is expected that the steady growth of the clinic will diminish the relative proportion of overhead, and that with other adjustments, the deficit can be wiped out before the close of the second year.

Cleveland Shows Progress

In Cleveland the hospital and health survey completed in 1920 by Dr. Haven Emerson recommended an enlargement of dispensary service and many improvements in detail. A report just issued by the Cleveland Hospital Council, under whose auspices Dr. Emerson's survey was conducted, describes the hospital and health status of Cleveland "Two Years After" the survey. With regard to dispensaries this report shows great progress. In 1920 there were six dispensaries connected with hospitals which were members of the Cleveland Hospital Council, expending $102,376.00; in 1922 there were ten dispensaries within the same group, with total budgets of $206,725.00.

The committee on dispensaries appointed by the Cleveland Hospital Council, as recommended by the survey, including not only representatives of the out-patient departments, but the department

of health and the Cleveland Academy of Medicine, reports progress in many details of work for the improvement of the dispensaries of the city. Special attention should be called to the cooperation thus achieved between the dispensaries and the local medical profession as represented by the Cleveland Academy.

The great importance of such cooperation is now much more fully recognized than formerly. The public health "demonstrations" at such places as Framingham, Mass., Mansfield, Ohio, and the projected demonstrations under the auspices of the Milbank Memorial Fund in New York state, all involve the relation between the local medical profession and certain clinical services. During the past year the demonstration at Mansfield, Ohio, has made progress and has outlined its policies relating clinics to the local medical profession in carefully drawn-up statements which, it is noteworthy, are submitted to representatives of the local profession *before* their adoption. Dispensaries all over the country which have been the subject of attack by local doctors on the ground of so-called "dispensary abuse" may well consider the procedure thus suggested.

Since 1916, when the American Hospital Association published a survey of dispensaries throughout the country, no satisfactory statistics have been available showing the growth of these institutions. Nineteen twenty-two was signalized by the completion of a survey of the American Medical Association, the main results of which were published in the *Journal of the American Medical Association* for August 5, 1922. The number of dispensaries, listed and estimated, totals 4,000, a growth of over fifty per cent above the estimate of six years before. These and other figures showing the present number and types of dispensaries in the United States will be dealt with in more detail in a special article in a later issue of THE MODERN HOSPITAL.

Change in Professional Attitude

The Associated Out-Patient Clinics of New York City issued, towards the close of 1922, a set of "Standards for Relation between the Out-Patient Department and the Wards." These standards regard the care of the sick person in the out-patient and in the wards as two phases of a single medical problem; and recommend that the medical staff serving the wards and serving the out-patient should be a single organization with very intimate relationships between the actual services of these two branches of the institution.

These "standards" are an indication of a change in professional attitude toward dispensaries which was marked in other ways during 1922. The annual Medical Education Congress, held in Chicago in March, devoted an entire session of its program to the dispensary, at which such a distinguished physician as William S. Thayer expressed his belief in the major importance of the out-patient department as the place in which the medical student should receive clinical instruction. The same point of view is manifested in a practical way in plans of a number of the leading medical colleges of the country for new out-patient clinics.

During 1922, plans for the Yale School of Medicine were summarized in a pamphlet published by that university, and feature the important position of the dispensary in the teaching and in the building program. The development at Cornell has already been referred to. In the plans perfected during 1922 by Dalhousie University at Halifax for a medical teaching group of hospitals, there was included a central building for out-patient clinics, worked out along most modern lines. Similar in principle is the projected scheme of the University of Colorado, and the plans thus far made public of the new medical teaching center of the Columbia University school of medicine also feature the out-patient clinic in a central position in the scheme. In all these plans the change of emphasis from a few years ago is very apparent, when the whole emphasis of medical teaching was in the wards.

Among the noteworthy publications of the year relating to dispensaries should be mentioned the book of Gerald Morgan, "Public Relief of Sickness" (Macmillan Company), the article by Dr. W. S. Rankin, "The Mutual Interest of the Profession and the Public," published in the *Journal of the American Medical Association*, July 22, 1922, and the article by Dr. Samuel W. Lambert, "The Real Significance of the Dispensary in Hospital Practice," published in THE MODEPN HOSPITAL, October, 1922.

A long list might be made of improvements and enlargements among dispensaries during the year. Within the space limits of this article it is possible to mention only the extension of the policy of out-patient treatment by the Veteran's Bureau under its own auspices, as evidenced by the notable dispensary established in the Grand Central Palace in New York.

When I consider what some books have done for the world, and what they are doing; how they keep up our hope; awake new courage and faith; soothe pain; give ideal life to those whose homes are cold and hard; bind together distant ages and foreign languages; create new works of beauty, bring down truths from heaven,—I give thanks for this gift, and pray God we may all use it aright and abuse it never.—James Freeman Clarke.

NAVAL HOSPITAL CONSTRUCTION DURING 1922

By CAPT. ARTHUR W. DUNBUR, Medical Corps, U. S. Navy, Washington, D. C.

DURING the World War, many naval hospitals were constructed and extensive additions made to existing hospitals to meet the urgent needs of the service in caring for the sick and injured sailors and marines. Much of this construction was of a temporary or semi-permanent character. These hospitals were erected not only within the continental limits of United States but also at various foreign bases.

Following the Armistice, those hospitals rendered unnecessary through the demobilization of the navy have been relinquished or placed out of service, and, in some instances, have been turned over to the Veterans' Bureau.

Sixteen Naval Hospitals on Continent

At the present time, within the continental limits, there are sixteen naval hospitals located at or near the various naval stations. In addition to the above, there are naval hospitals at St. Thomas, Virgin Islands; Honolulu, T. H.; Guam; Canacao (Manila, P. I.), and Yokohama, Japan. Afloat are the hospital ships RELIEF and MERCY, both of the ships, particularly the RELIEF, embodying all the facilities of a thoroughly equipped hospital ashore.

In planning a naval hospital, consideration must be given to the fact that these hospitals do not serve a constant population but their bed capacities must be calculated to meet the needs of a fleet which may be based upon the port where the hospital is located and provision must be made for a rapid extension to meet war conditions when a hospital may be used as a base or evacuation hospital for advanced-base hospitals and ambulance ships. With this fact in view, the naval hospital is given very liberal provisions for adminstrative work and for the subsistence of patients. This arrangement permits of the erection of temporary wards when required, supplying a great extension in bed capacity. Another feature, which is peculiar to naval hospitals, is that there is a much higher proportion of ambulant cases in a naval hospital than in a civil hospital, owing to the fact that patients must be retained in a hospital until fit for active duty, as contrasted with the practice in civil hospitals where a patient is permitted to leave the hospital when able to go either to his home or to a convalescent center for complete recovery.

Building Program at Aviation Base

Owing to facts cited above, there has been but a limited amount of new construction undertaken since the war, and this has occurred at San Diego, Cal., at which place the navy has established a naval aviation base and a base for the destroyer flotilla. In addition, in the event of any belligerent action in the Pacific, this port would undoubtedly be an important base of operations. This has necessitated plans for the erection of a hospital which could be rapidly extended to a thousand beds or more.

During the World War, owing to the mobilization of naval forces at San Diego, it became necessary to establish a temporary hospital which was at first small in size located in one of the exposition buildings in Balboa Park. As the needs increased, it grew by taking over other buildings. This arrangement, however, was not satisfactory for permanent use. A reservation of 10.7 acres was tendered the government by the citizens of San Diego. The site is located on ground about 224 feet above sea level and surrounded by the park system of San Diego, known as Balboa Park, which will prevent encroachment of the residential section of the city upon the hospital.

The plan selected for this hospital is that of a rectangular block. The orientation is westerly,

U. S. Naval Hospital at San Diego, Cal., is the one important piece of construction undertaken by the Navy during the past year.

this being necessitated by the nature of the terrain; the hospital, facing the Pacific Ocean and the harbor of San Diego, is favorably situated in regard to the prevailing breeze.

Mission Type of Architecture Employed

In order to conform to the local style of architecture, the Mission type has been adopted. The construction is fireproof, consisting of hollow tile with light buff stucco exterior. The interior is finished with plaster laid on metal lathe, with hollow tile partitions. The roofs are pan-and-cover red tile, or, where required, glass tile; and on flat roofs a pitch composition is used.

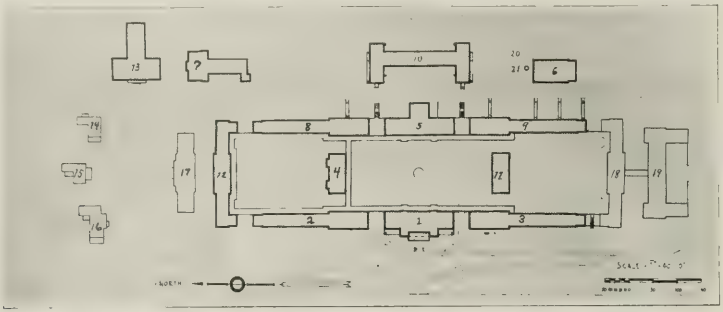
In the wards and corridors of the hospital building red magnesite has been adopted, this being laid on a concrete base with a cove of the same. The diet kitchens, toilets, bathrooms, utility rooms and dressing rooms have a white vitreous 2⅛-inch square tile floor and wainscot. The lobby of the administration building has the floor and wainscot of gray Tennessee marble. The dining rooms in the subsistence building have a magnesite floor. The main operating rooms have a floor of white marble tiles 6x6 and also a seven foot wainscot of the same material. The walls generally, where no wainscot is provided, are of plaster and painted a light buff color.

No artificial ventilation system is provided but all ward spaces are furnished with double hung windows provided with separate shades for each section. The various buildings of the hospital are provided with automatic telephone connections. A silent call system is installed in all spaces occupied by patients.

Electric elevators (not automatic) are provided in all separate buildings. Automatic electric dumbwaiters are furnished for serving the food to the diet kitchens on the various floors.

The power house, located in the southeast corner of the reservation, supplies steam for all purposes. A recently devised burner of high efficiency, through the use of compressed air, makes this arrangement very economical. Electric current is obtained from the city mains.

Heat is supplied by direct radiation, steam being carried through high pressure lines to each building and there reduced. Hot water is furnished from generators in the basement of each building.



Plot Plan of Naval Hospital, San Diego, Cal.

In the completed hospital the erection of the following buildings is contemplated:

An administration building is located at the center of the west side of the rectangle with a two and one-half story ward building on either side. On the east side of the rectangle at the center is a three-story subsistence building and on either side of that a three-story ward building. The north and south ends of this rectangle are to be closed by ward buildings. The enclosed court, having dimensions of 380 by 85 feet, is divided into three equal portions by walks, and will contain an operating building and a specialty building, the former located between the proximal ends of the northerly wards and the latter in corresponding position between the southerly wards.

In the rear of the subsistence buildings there is to be erected a building for the installation of the various artificers' work shops and on the second floor barracks for the hospital corpsmen. To the northward of this building is a recreation building erected by the Red Cross.

North of the main hospital will be erected a ward for officer patients and quarters for the medical staff and for the nurses. To the south of the hospital, there is to be a contagious building, and in the southeast corner building for the civil personnel.

Enclosed Passageway Between Buildings

All the buildings assigned for the care and treatment of the patients are to be connected on their court side by a covered and partially enclosed passageway, that portion connecting the

operating building with the wards being entirely enclosed.

The administration building is three stories in height in the wings and five in the center, the latter being surmounted by two ornamental Mission towers. The first floor of this building has a waiting room, offices for the commanding and the executive officers and the officer of the day, offices for administrative purposes generally, and a dispensary. On the second floor are located consultation rooms, a medical library, chief nurses' offices and offices for the junior medical officers. On this floor, and also on the third and fourth floors with the necessary toilets, utility rooms and diet kitchens, are thirty rooms for patient officers. The roof over the central portion is partially enclosed for use as a solarium.

The ward buildings are so similar that one description will, with minor exceptions, serve for all. Each is calculated for thirty beds on eight-foot centers, giving approximately 1,200 cubic feet of air space per patient. The proximal portion of each ward space contains four quiet rooms, a linen room, dressing room, utility, bath, toilet, diet kitchen and nurse's room. At the distal end is located a large solarium separated from the ward by a utility room and toilets. Each ward wing on the west side has two complete stories and for about half its length a fourth floor which is designed for treatment in the open air, having a large open area 20′ by 20′, the rest of the space being occupied by a recreation room, diet kitchen and the usual utility rooms.

The ward buildings on the west side of the rectangle differ from the preceding only in that they have an additional ward in each.

The north and south buildings, completing the enclosure, will be two stories at the western end and three stories at the eastern end, being adapted to the height of the adjoining wards on the west and east sides, respectively.

Subsistence Building Well Equipped

The subsistence building has a basement in which is located a carbonic acid refrigerating machine which also manufactures ice for the hospital. Separate chill rooms are provided for fresh meats, smoked meats, poultry, butter and eggs, milk, vegetables, and ice cream, the temperature of each of these spaces having automatic thermostatic control. The remaining space of this basement affords storage for dry provisions and the meat and vegetable preparation rooms and a mess room for the civil employes. The supplies are transported to the main kitchen by means of dumbwaiters. On the first or ground floor, centrally located, is the main kitchen, with a complete equipment of ranges, stock kettles, steam roasters and steamers. The fuel used in the venient. Adjacent to the main kitchen is the main diet kitchen. The wings of this building are occupied by two mess rooms, each accommodating ninety-six patients, and scullery equipment. Two sterilizing and dishwashing machines assure thorough cleansing of tableware. On the second floor is located the mess rooms for the hospital corps (72 men) and 119 patients, also a dining room for the staff mess.

The operating building consists of two stories. On the ground floor is the dental operating rooms, dressing room, operating room for nose and throat department, a small laboratory and x-ray room. This floor is magnesite. The main operating rooms, two in number, are situated on the second floor with a northern exposure, and have between them the sterilizing and instrument rooms. Separated from the above by an east and west corridor are the anesthetizing rooms, recovery room, the nurses' dressing room and a work room. Artificial lighting of the operating rooms is provided by five 100-watt ceiling lights. Access to this floor is by means of elevator and also by a stairway. The main operating rooms have white marble floors and wainscoting of the same.

Six Buildings Are Completed

Detailed plans for the building for sick officers and for the isolation unit have not yet been drawn. At the present time, the following buildings have been completed: the administration building, adjacent two ward buildings, operating building, subsistence building, power house and recreation building, and under construction are the service building and the nurses' quarters and the two wards adjacent to the subsistence building. The specialty building, when completed, will contain the general laboratory activities, chemical, bacteriological and serological, also the x-ray department and the eye, ear, nose and throat service. A complete physio-therapy service will also be installed.

In addition to building the San Diego Hospital, an extension of the bed capacity of the Naval Hospital, Puget Sound, is being made by the building of a two-story ward building which increases the size of this hospital by sixty beds. Plans for replacing the present wooden hospital at the Navy Yard, Mare Island, Cal., by a reinforced concrete building are being made. This hospital will be practically on the same plan as the present one. Funds have also been allotted for an increase of bed capacity at the Naval Hospital, Pearl Harbor, Hawaii, and also for the erection of quarters for the medical staff.

FOUR OF THE LEADING FIGURES IN THE CANADIAN HOSPITAL FIELD

Mr. F. Barry Hayes
President
Ontario Hospital Association

Dr. George F. Stephens
President
Western Canada Hospital Association

Mr. Joseph Needham
President
Saskatchewan Hospital Association

Dr. H. C. Wrinch
President
British Columbia Hospital Association

IMPRESSIONS FROM THE CANADIAN FIELD

By MALCOLM T. MacEACHERN, M.D., Superintendent, Vancouver General Hospital, Vancouver, B. C.

TO SAY the least, progressive hospital development throughout Canada has been evidenced on all sides during the year just closed. A few outstanding features are worthy of note.

The hospital profession is becoming more noticeably recognized as such, and no doubt this definite recognition in the minds of the public will be considerably accentuated in the future through the findings of the Rockefeller report on the training of hospital executives. This report is of vast importance to the hospital field, as it will lead to greater permanency in personnel, resulting in more intensive study and practice of hospital administration along scientific lines.

Hospital authorities are assuming more responsibility in their efforts. Governing boards of hospitals generally are realizing more than ever that it is their duty to render the most efficient service to the patient within the walls of their hospital, and to arrive each month at a true general balance between the financial outlay and the physical results obtained. They realize that hospitals should not only keep a carefully compiled and audited financial statement, but that there should also be a similar monthly professional accounting showing the net results of treatment. In other words, there is a tendency towards better accounting, professionally as well as financially, in Canadian hospitals.

Western Canadian Meetings Successful

Far-reaching results will follow the several conventions held in Canada during the year. Most successful provincial meetings were held in British Columbia, Alberta, Saskatchewan and Manitoba. In each of these provinces are found well organized and active associations.

Other meetings of importance were held. In November the Western Canada Hospital Association and Western Canada Catholic Hospital Association met in Winnipeg and held successful meetings. The outstanding feature of all these conventions was the practical nature of the deliberations, there being more round table conferences and discussion than papers, and many practical demonstrations of interest to all the groups represented. In every meeting held the viewpoint of the small or community hospital was kept in mind. Such meetings resulted in arousing greater enthusiasm in the work, in throwing light on various intricate hospital problems, and in disseminating fine publicity in the community. Little progress in hospital organization for central and eastern Canada can be reported, as none of these provinces has yet been actively organized.

Sectional meetings of the American College of Surgeons were held for the various provinces of Canada, namely—Maritime Provinces at Halifax Quebec at Montreal, Ontario at London, Manitoba at Winnipeg, Alberta and Saskatchewan at Regina, and British Columbia at Tacoma, Wash. These meetings, dealing as they do with the professional efficiency of the institution or hospital standardization, accomplished a wonderful amount of good for the hospitals in Canada this year. Everywhere a meeting of this nature was held there was a splendid attendance; interest and enthusiasm were manifested, with most beneficial results following.

Problems of Finance Unsolved

Financing of hospitals continues to be an unsolved problem and the majority are struggling under continuous deficits. Possibly the more heavily endowed and the municipal institutions are exceptions to this. The increased demand for service of a more thorough and scientific nature of necessity increases the daily cost. So far as can be estimated at this writing, the average per diem cost in general hospitals for the year 1922 will be between $3.25 and 3.50. This applies to non-teaching general hospitals with private, semi-private and public patients. The decrease in the price of supplies and commodities used in Canadian hospitals has not affected the per diem cost much on account of the increased cost of services to meet the present day demands already referred to.

Training schools for nurses in Canada are making excellent progress everywhere. Satisfactory student material is more available and young women of good standing with the necessary education and physique are applying. In some training schools applications are so plentiful that the superintendent or director of nurses can exercise most careful selection.

Better Living Conditions for Nurses

It is pleasing to note that greater attention generally is being given to living conditions for nurses. Several new nurses' homes worthy of note have been erected during the past year which combine the best and most modern accommodation with attractive and comfortable appointments. The writer was indeed very inter-

ested, when visiting a hospital this summer in a town of 5,000 to 6,000, to find not only a splendid home with fine appointments, but a social director to look after the social life of the nurses in training. It is gratifying to note that the necessary and proper accommodation is being provided when building new hospitals or adding thereto. Formerly nursing accommodation was more of an afterthought, but now it receives early consideration in any contemplated extension.

Nursing in Canada is well organized; greater interest is being manifested in nursing education; and there is a tendency towards linking it up closely with the universities. It is hoped the time is very near at hand when there will be several university schools of nursing in Canada. It is the writer's opinion that all nursing education should be turned over to the universities, with the hospitals used for practical experience. This would not only create better and more uniform standards but would be far more economical in administration and efficient in results. The five-year course established three years ago in the University of British Columbia is progressing most satisfactorily and now almost thirty students are enrolled. The first class to graduate will be in May next.

Personal Observations in the Field

During the year the writer has had an opportunity to visit 133 hospitals in Canada in connection with the hospital standardization movement of the American College of Surgeons. In this connection a few facts and observations are worthy of note:

1. Out of 133 general hospitals there are sixty of 100 beds or over, and seventy-three of fifty to 100 beds. Of the first group, fifty, or 83.4 per cent, and of the second group, thirty-five, or 47.9 per cent, have met the standard. In aggregate 62.4 per cent of the hospitals in Canada of fifty beds or over are on the approved list. Of the remaining forty-five there are thirty-six making satisfactory progress towards attaining recognition in the next survey.

2. Staff organization, with the resulting staff conferences almost universally being carried on, is accomplishing much for a more constructive professional policy in Canadian hospitals, with increased interest and better cooperation and cohesion among the medical group.

3. A very noticeable feature is the better working together generally of the three great hospital groups, (a) the governing board, trustees or directors, (b) the doctor, and (c) the hospital staff; all realizing more fully than ever before that they have a common objective and interest, the best care of the patient.

4. There has been a marked improvement in hospital facilities, as for instance: forty to fifty x-ray departments and clinical laboratories have either been established or improved during the year.

5. There are, however, some matters of importance that Canadian hospitals have so far failed to develop. There is a great lack of facilities for physio-therapy, an important branch of treatment today which should be carried on in most of our institutions. Another department noticeably lacking is that of social service. It is true that all the large hospitals in cities have well developed departments, but this is a service which could and should be more in evidence in almost all of our hospitals, large and small.

A Glimpse into 1923

In conclusion, what may we of the Canadian field look to in 1923? Is our work perfected and completed? No, we are only in the dawning of hospital development. It is hoped that preventive medicine through its many activities will some day permit us to close up at least part of our hospital wards. However, our hospitals will be needed for a long time yet in the great battle of health, with all their personnel, equipment and reinforcements. It is to be desired that there may develop a closer working contact between the hospital as a curative agent on the one hand, and preventive medicine with its public health organization on the other.

Let us encourage in 1923 the idea of the hospital as a community health center. Let us encourage coordination and cooperation between the fields of preventive and curative medicine. We all have one common objective, each having his particular role to play in accomplishing the task. Let all the component parts of the great army of health, whether preventive or curative, come together in solid line, shoulder to shoulder or hand to hand, so as to present a strong front on our task. What we need is greater consolidation, coordination and cooperation, which will mean not only greater economy in administration but increased efficiency through more effective effort.

Let us in the year 1923 pay more attention to the small community hospital, which is doing real service under real difficulties. The entire question of hospitalization should receive closer study as there are many instances where there is need for better distribution of hospital service to the community. In many instances there is inadequate institutional service afforded, and this is of great importance in industrial communities. Many problems connected with hospital service to industrial towns of from 3,000 to 10,000 population are yet unsolved, and it is our duty to give all the assistance we can in the solution of such questions and the promotion of better hospital service generally.

For 1923 the writer prophesies a spirit of continued progress in every field of hospital activity, with greater development and satisfactory solution of many difficult problems. Let our motto to the community be "At your service," and in performing this service let us make sure it is characterized by efficiency of the highest degree.

HOSPITAL STANDARDIZATION ACTIVITIES IN 1922

By FREDERICK W. SLOBE, M.D., Hospital Standardization Department, American College of Surgeons, Chicago

DURING 1922 the American College of Surgeons conducted its fourth annual survey of general hospitals of the United States and Canada. The origin of the hospital standardization program as a logical accompaniment to the efforts of the College in improving the practice of surgery; the formulation of the minimum standard in 1919; the method of surveying each hospital personally once a year; and the growth of the movement until over four-fifths of the general hospitals are on the approved list of the College, all are too well known to require repetition here.

The minimum standard, which has served as the basis for each hospital survey, has proved to be also a practical criterion for the issuance of an annual list of approved hospitals. This list is no classification of institutions but is rather an enumeration of those hospitals meeting the requirements of the minimum standard. Whether the standard of the College has stood the test of time is best answered by the fact that it has not been modified since its inception.

Designed as a universal as well as a *minimum* standard, it must be restricted to the basic principles underlying the best hospital service. This limitation to fundamentals and avoidance of unnecessary detail give the standard sufficient elasticity to meet varying conditions. The College recognizes the importance of many features not mentioned in its standard; these lack, however, sufficient uniformity in various hospitals, states, and provinces to warrant an equitable basis for comparison and rating. It is believed, furthermore, that in the careful observance of all the principles of this standard, the various unmentioned features should be cared for automatically.

Progress of the Annual Surveys

The College has made four annual surveys of the general hospitals in the United States and Canada. In 1918, 89 of the institutions having 100 or more beds were found to meet the standard; in 1919, 198 fulfilled the requirements; in 1920, 407, or 57 per cent, met the standard; in 1921 the number of approved hospitals grew to 579, or 76 per cent; and this year 677, or 83 per cent, of the 812 hundred bed general hospitals are on the approved list.

Until this year the approved lists have been limited to hospitals having a capacity of 100 or more beds. Although, in 1920 and 1921, many of the smaller hospitals were visited, this year for the first time a complete survey of the hospitals having between fifty and 100 beds was made. There are 811 general hospitals having between fifty and 100 beds, of which 335, or 41 per cent, are approved. This is an excellent showing in view of the fact that previous lists have not included these smaller institutions.

The smaller hospitals are under greater difficulties than the larger institutions. Many are forced to be practically self-supporting; the physicians are more prone to develop personal rivalries which retard staff organization; it is difficult for them to obtain interns; and sufficient laboratory service is often a serious problem. In spite of these difficulties, however, the small hospitals have welcomed the minimum standard with the same spirit manifested by the large institutions. Indeed, it is in these small hospitals where the greatest change in hospital service has been manifested. It requires patience to establish a complete case record system; to organize a harmoniously functioning staff; and to arrange for adequate laboratory service. These small institutions are to be especially commended, therefore, on the excellent showing which they have made.

Considering as a group the 1,623 general hospitals having over fifty beds, 62 per cent or 1,012 meet the requirements of the standard.

The College surveys consist of a *personal* study of each individual hospital. Many inaccuracies inevitably creep into a survey that is carried on through correspondence and questionnaires. During 1922 the corps of hospital visitors of the College consisted of nine physicians from various sections of the United States and Canada. Since the uniformity of a survey varies in inverse proportion to the number of men employed, by using relatively few visitors all similarly trained. the College obtains strictly uniform reports. As an additional safeguard, each visitor covers a large number of states and provinces in order that he may obtain a general rather than a local viewpoint. Upon such detailed personal surveys the College is dependent for an accurate estimate of each hospital's status relative to the minimum standard.

The purpose of the visitors is to explain the minimum standard, to interpret its application to each hospital, and to offer constructive criticism and helpful suggestions to remedy any existing shortcomings. This campaign is one of suggestion only; there is no element of coercion en-

tailed. It succeeds through the sanction and approval of the hospitals themselves.

Staff Organization. A definite staff organization with centralization of responsibility in certain committees is essential; the exact type of organization chosen is a matter for each hospital to decide. The courts have sustained the right and duty of a hospital in restricting its membership to the ethical and competent. Definite action absolutely prohibiting the practice of fee-division is a prerequisite for an approved rating. In small communities the initial organization may preferably be broad in its scope with subsequent changes as conditions permit. "Courtesy" staff members should be expected to live up to all the obligations a hospital expects of its "regular" staff.

The most illuminating type of staff meeting is the "casualty" conference, including a discussion of the deaths, infections, complications, unimproved cases, and in fact anything closely related to the clinical work in the hospital. This type of conference has passed the experimental stage; it is enthusiastically endorsed by all varieties of hospitals which have given it a fair trial. Case records form the basis for the discussion at these meetings. All physicians should be invited to attend these staff meetings, but attendance should be *required* of those who have had patients in the hospital during the preceding month.

Case Records. Lack of supervision of the records by the professional and administrative staffs stands out as the paramount reason for incomplete records. The use of a record clerk or historian is a practical necessity in hospitals without interns. In order to fulfill the manifold functions of a record department, even small hospitals should have a full-time historian. Physicians who make a careful study of their patients in their offices before sending them to the hospital should send copies of their office records to the hospital.

A brief stereotyped form of case record is found in many hospitals; the remedy is increased personnel to procure the records and increased interest by the staff. Operation records are notably weak in a complete description of the exploratory findings and operative technique; dictation of the operative report during the operation or recording immediately afterward is essential to insure accurate data. There is need for a greater utilization of the case records for analysis at staff conferences and for statistical studies.

Laboratory Service. Adequate supervision of technicians is lacking in many hospitals; a part-time pathologist or a staff member well versed in laboratory work should be in close touch with every laboratory. Physicians hesitate to prescribe laboratory tests if a separate charge is made for each test performed. The adoption of a flat-rate fee or the addition of a certain charge to each room or rate per day alleviates this difficulty. Hospitals should have a laboratory of their own for the performance of the usual routine examinations; the more technical tests may be performed elsewhere provided they are performed whenever indicated and in competent, accessible laboratories.

It is impractical to attempt to suggest a minimum laboratory requirement, but a routine urinalysis, hemoglobin estimate, leucocyte count, and examination of tissues seem to form a reliable basis for a minimum recommendation. The sending of every tissue to the laboratory should be as rigid a part of the operative room technique as the sterilization of instruments.

Patients do not receive uniform roentgenological service if interpretations are made by the individual physicians. A trained roentgenologist should be in charge of each x-ray laboratory even if only in a part-time capacity. X-ray laboratories are becoming more of a routine equipment in all hospitals due to the difficulty of giving adequate service to non-ambulatory patients in outside laboratories.

Three Stages in Development of Standard

Hospital standardization for 1922 has been a carrying on of the program following the foundation established during the three preceding years. In addition to the follow-up visits to the larger institutions, special efforts this year were directed toward the hospitals having between 50 and 100 beds, which were included in the approved list for the first time.

In the institutions visited this year there are represented all stages in the development of the application of the minimum standard to hospitals. The first, or "incipient stage" of standardization, is represented by certain hospitals which have recently adopted the standard and are in the process of organizing a staff, establishing a case record system, and improving laboratory service; these hospitals are meeting certain difficulties but are gradually adapting themselves to the new conditions. Again, in other hospitals we find a firmly established foundation and a gradual elaboration of the principles involved in this standard. And finally, we meet with institutions where a harmonious group of staff members freely cooperate with one another; end-results are frankly analyzed; records have a real meaning; and where each patient receives the benefits of a maximum amount of diagnostic laboratory aid—where, in brief, the true spirit of the minimum standard is realized.

THE DEVELOPMENT OF THE NATIONAL SOLDIERS' HOME SERVICE

By JAMES A. MATTISON, A.B., M.D., F.A.C.S., Chief Surgeon, National Home for Disabled Volunteer Soldiers, Dayton, Ohio.

THE following is a list of the branches of the National Home for Disabled Volunteer Soldiers, together with the dates their establishment was approved by acts of Congress:

Central Branch, National Military Home, Dayton, Ohio, March 21, 1866.

Eastern Branch, National Soldiers' Home, Togus, Maine, March 21, 1866.

Northwestern Branch, National Home, Milwaukee, Wis., March 21, 1866.

Southern Branch, National Soldiers' Home, Hampton, Va., March 21, 1866.

Western Branch, National Military Home, Leavenworth, Kan., July 5, 1884.

Pacific Branch, Soldiers' Home, Sawtelle, Cal., March 2, 1887.

Marion Branch, National Military Home, Marion, Ind., July 23, 1888.

Danville Branch, National Home, Danville, Ill., June 4, 1897.

Mountain Branch, National Sanatorium, Johnson City, Tenn., Jan. 28, 1901.

Battle Mountain Sanitarium, Hot Springs, S. D., May 29, 1902.

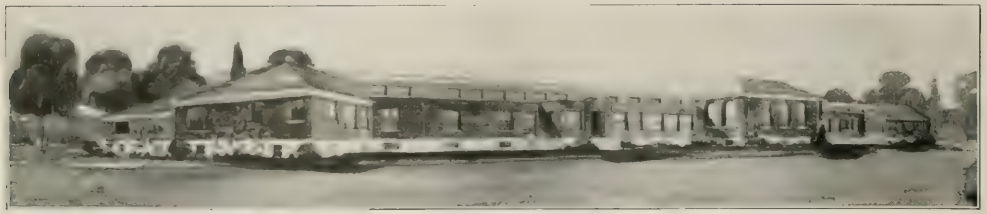
These institutions were established for the purpose of furnishing hospitalization and domiciliary care to men who had served in the Civil War, or any other war in which the United States had been engaged. At later dates, men who had served with the U. S. Army in any subsequent war, the Spanish War or the World War, were made eligible by acts of Congress. First of all, hospital facilities were provided consisting of hospitals of about 300 to 500 beds, to which were added the necessary utilities, such as administration and service buildings, power plant, laundry, electric light plant, storehouses, theatre buildings, amusement halls, chapels and barns. After facilities were provided for hospitalization, it soon became apparent that there would be a large number of men whose disabilities were such that they were permanently disabled, who would not require continuous constructive hospitalization, but only domiciliary care. Barracks were grouped around a central congregate mess hall for the purpose of caring for such domiciliary cases as did not require active hospitalization. From time to time, additional facilities and equipment have been added to the hospitals of the various branches, capacities of these hospitals increased as required, and additional barracks provided for domiciliary care.

The following persons are entitled to the benefits of the National Home for Disabled Volunteer Soldiers: honorably discharged officers, soldiers, sailors and marines who served in any war in which the United States has been engaged, in Indian campaigns, or who served in any of the extra-territorial possessions of the United States, in foreign countries, including Mexican border service, or in the organized militia or national guard when called into the federal service, provided they have a disability, either of service or non-service origin, which requires treatment.

By act of Congress approved Oct. 6, 1917, service men of the World War, in need of hospitalization or domiciliary care, were made eligible for admission to the National Home. At the close of the World War, when the Bureau of War Risk Insurance was established as the responsible agency for providing hospitalization for veterans with disabilities of service origin it was found that adequate facilities for caring for these men properly were not available. By the passage of the sundry civil bill for the fiscal year 1921, the director of the Bureau of War Risk Insurance was authorized to make an allotment of funds to the National Home for increasing facilities and making such alterations and improvements as might be necessary for the purpose of modernizing the hospitals of this service, and giving active constructive treatment to as many beneficiaries of the bureau as it might be able to provide beds for. The Bureau of War Risk made an allotment of $4,570,000 for this purpose in 1921.

1000 Bed Neuro-Psychiatric Hospital at Marion

Marion Branch, Marion, Ind. After the allotment was made, a committee of consultants consisting of Dr. Thomas W. Salmon, chief medical advisor, National Association for Mental Hygiene; Dr. A. M. Barrett, professor of psychiatry, University of Michigan; and Dr. Douglas H. Sanger, state director of psychiatry for Illinois; together with Colonel C. W. Wadsworth, general treasurer, and Col. James A. Mattison, chief surgeon, of the National Home service, made a thorough survey of this branch, and such structural changes as were necessary for converting it into a modern neuro-psychiatric hospital were outlined by the committee, and the work carried forward to completion as rapidly as possible. This was done at a cost of approximately $1,500,000, thus providing a modern 1,000 bed neuro-psychiatric hospital.



Neuro-psychiatric and Tuberculosis Hospital, National Military Home, Marion, Ind.

At a later date a thoroughly modern clinical laboratory was provided, a new shops building constructed for the occupational therapy service, facilities provided for physiotherapy, a pavilion especially planned for neuro-psychiatric patients suffering from tuberculosis completed, and plans are now under way for the construction of a physical rehabilitation building. When completed this plant will consist of a receiving hospital, treatment hospital, an 80 bed tuberculosis pavilion, twelve cottages with a bed capacity of 60 each, all of which are of modern, permanent brick construction, either fireproof or fire-resisting, making a total capacity of 1,080 beds. This institution is provided with personnel, including doctors, nurses and attendants, especially trained for caring for neuro-psychiatric patients. This reservation comprises 300 acres, which includes facilities for truck gardening, farming, dairy farming, floriculture and poultry raising. There are 68 buildings on the reservation. In view of the fact that this entire institution was made available for hospital purposes, it has been designated as the Marion National Sanatorium.

1,100 Bed Tuberculosis Hospital

Mountain Branch, Johnson City, Tenn. A committee of consultants consisting of Dr. H. A. Pattison, supervisor of medical service, National Tuberculosis Association; T. B. Kidner, institutional secretary, National Tuberculosis Association; and Dr. A. H. Garvin, director of the Municipal Hospital, Detroit; together with Col. C. W. Wadsworth, general treasurer, and Col. James A. Mattison, chief surgeon of the National Home service, made a special survey of this branch, and outlined the necessary structural changes for converting it into a modern tuberculosis hospital. These changes were carried forward as rapidly as possible and were completed at a cost of approximately $750,000.

They provide a modern treatment hospital of about 200 beds for bed patients, a hospital of about 120 beds for semi-ambulant patients, an annex of about 90 beds for segregation and treatment of colored patients, all provided with special messing and other facilities required. Six modern brick buildings which had been used for domiciliary purposes had the necessary alterations and improvements made to fit them for pavilions for the proper accommodation of domiciliary patients, with a congregate mess hall, centrally located to these pavilions. All of these buildings, except the annex, are brick and practically fireproof. With these alterations and improvements, a modern tuberculosis hospital of about 1,100 beds was made available.

At the present time plans are being worked out for a modern clinical laboratory for carrying on such routine and research laboratory work as is indicated in such an institution, at an estimated cost of $100,000, and an isolation building at an estimated cost of $50,000.

This institution is provided with personnel, including doctors, nurses and attendants, especially trained for caring for tuberculosis patients. This reservation comprises 447 acres, which includes facilities for carrying on truck gardening, farming, dairy farming and poultry. There are 59 buildings on the reservation. In view of the fact that this entire institution was made available for hospital purposes, it has been designated as the Johnson City National Sanatorium.

Tuberculosis Unit at Dayton Completed

Central Branch, Dayton, Ohio. At this branch the necessary alterations and improvements were made to modernize the hospital. A group of five of the barracks was thoroughly overhauled, necessary alterations and improvements were made, such as rebuilding water sections, adding concrete porches, and building a new dining room and kitchen with connecting corridors to each of the five buildings, thus making an additional 450 bed hospital unit. The tuberculosis pavilion had extensive alterations and improvements made and new dining room and kitchen added, thus providing a very satisfactory tuberculosis pavilion. This made provision for the proper care and treatment of about 600 general medical and surgical patients and about 300 tuberculosis patients. Almost one-half is used for World War veterans.

Tuberculosis Hospital Unit, Central Branch, National Home for Disabled Volunteer Soldiers, Dayton, Ohio.

At the present time there is under construction a 250 bed tuberculosis unit which will be opened early in January. This was constructed at a cost of about $750,000 and is one of the most modern fireproof tuberculosis hospitals in this country. It will be used almost to capacity for the care and treatment of World War men. In addition, there are dormitory facilities for approximately 1,900 members requiring domiciliary care. This reservation comprises 578 acres and 100 buildings.

Pacific Branch, Sawtelle, Cal. (near Los Angeles). The hospital at this branch has been recently modernized, all water sections rebuilt, additional rooms provided for isolation purposes, and a new modern fireproof tuberculosis unit with a capacity of approximately 300 beds added. Two wings of this unit have been completed and are now occupied. Plans and specifications are being prepared for the completion of the administration and service buildings for this unit and for providing additional quarters for personnel, at a cost of approximately $300,000. This hospital has a capacity of approximately 400 beds for general medical and surgical cases, and 300 beds for tuberculosis cases, almost fifty per cent of which are occupied by World War men. In addition there are dormitory facilities for approximately 1,900 members requiring domiciliary care. This reservation comprises 675 acres, a large part of which is utilized for truck gardening, farming, fruit growing and poultry raising. There are 101 buildings on the reservation.

$1,200,000 Tuberculosis Hospital Ready

Northwestern Branch, Milwaukee, Wis. The hospital at this branch has been thoroughly overhauled, all water sections rebuilt, and a new service building added, giving a modern dining room and kitchen. A new 500 bed modern fireproof tuberculosis hospital is being completed at a cost of $1,200,000, and will be ready for occupancy early this month. About ninety per cent of the beds in this unit will be utilized for the treatment of World War men. This makes provision for approximately 400 beds for general medical and surgical cases, and 500 tuberculosis cases. More than fifty per cent of this capacity will be utilized for the care and treatment of World War men. In addition, there are dormitory facilities for approximately 1,000 members requiring domiciliary care. This reservation comprises 382 acres and 65 buildings.

Eastern Branch, Togus, Maine; Southern Branch, Hampton, Va.; Western Branch, Leavenworth, Kan.; Danville Branch, Danville, Ill.; and Battle Mountain Sanitarium, Hot Springs, S. D. At these five branches of the home, hospitals of from 300 to 600 beds are maintained, and extensive alterations and improvements have been made to modernize them, although on not so extensive a scale as at the former five branches. Dormitory facilities for approximately 1,000 to 2,100 members, requiring domiciliary care, are provided for these branches except the Battle Mountain Sanitarium.

Equipment Complete at All Branches

At each branch, complete modern x-ray equipment and adequate clinical laboratory facilities have been installed, provisions made for dental clinics at all branches except two, and complete occupational therapy and physiotherapy services at most of the hospitals. General surgical, genitourinary, and eye, ear, nose and throat clinics have been made available, and visiting consultants added to the hospital staffs.

The personnel, including medical officers, trained nurses and dietitians, has been very greatly increased at the hospital of each branch during the last two years.

At most of the branches, extensive additions have been made to the nurses' homes, a total of 60 additional homes have been built for medical officers with families, and adequate facilities are provided for properly housing all other personnel.

Practically all buildings in this service are of permanent brick, stone or concrete construction.

Oh lift your natures up:
Embrace our aims; work out your freedom, Girls;
Knowledge is now no more a fountain sealed:
Drink deep, until the habits of the slave;
The sins of emptiness, gossip and spite
And slander, die. Better not be at all
Than not to be noble. —Tennyson.

SOME REPRESENTATIVE SMALL HOSPITALS CONSTRUCTED IN 1922

(Upper left) Carbon County Memorial Hospital, Rawlings, Wyo.; (upper right) William Henry Lewis Memorial Hospital, Atascadero, Cal.; (center) Brown Memorial Hospital, Cincinnati, Ohio; (lower left) Central Alabama Hospital, Clanton, Ala.; (lower right) Ellsworth Hospital, Ellsworth, Kan.

VENEREAL DISEASE CONTROL DURING 1922

By ALEC N. THOMSON, M.D., American Social Hygiene Association, New York, N. Y.

A YEAR ago, in reviewing 1921, the statement was made that there was no startling advance during the year, but indications of a slow, steady step toward real progress. The same may be said of the year 1922. More thought and consideration than ever before have been given to venereal disease control in all its phases in this country and abroad. There has been, perhaps, less money available both in official and unofficial channels. Federal appropriations have been in a large measure reduced or withdrawn, and the work of the United States Interdepartmental Social Hygiene Board was discontinued on June 30, 1922. Most of the states have been able to hold a part or all of their state appropriations for venereal disease work.

While all states have not taken kindly to the Sheppard-Towner bill, it is of more than passing concern to the control of venereal disease. It is obvious that hospital, dispensary and general medical work devoted to maternity welfare can be made a potent factor in controlling syphilis in children, both acquired and congenital, in eradicating ophthalmia and in bringing parents under adequate treatment.

Number of Treatments Has Increased

It is the general impression, borne out by such figures as are available, that the gross number of treatments administered to those suffering from gonorrhea and syphilis has increased, as well as the number of patients attending clinics. It is no longer possible in summing up the work of a year to make comparisons in the total number of treatment visits of one year against another. The methods of treatment have so changed that where a patient a year or so ago made one visit a week he now makes two or three, and vice versa. It would seem that a study of the gross figures probably would not balance the changes. As an illustration, the treatment of gonorrhea in the male, by irrigation in some clinics, calls for a daily visit or even two visits a day, whereas the treatment at home by the patient calls for only two visits a week. In the same way one cannot compare one clinic with another without knowing all details of method and treatment, one cannot compare this year with previous years without knowing the variations in treatment which may count for an increase or decrease in the total volume of business. As a matter of fact, as shown by the United States Public Health Service the variation in number of new patients from year to year has been but slight. It is quite evident that patients are being held to treatment for a long enough period to render a much larger number non-infectious.

Fewer cases of venereal diseases by 14 per cent were reported in 1922 than in 1921. How is this decline to be accounted for? Are fewer new cases being contracted? It is probable that a large proportion of case reports are of persons receiving treatment in clinics. This assumption is borne out by a study recently made under the direction of the American Public Health Association*. As a part of this study a comparison was made of the number of cases reported and the number of cases treated in venereal disease clinics in 35 cities where reports on both of these points were available. In the 35 cities taken together the rate per 100,000 population of cases reported was 680.5, and of cases treated in clinics 581.4. In other words, about 85 per cent of the cases reported were receiving free or low cost treatment. It seems hardly reasonable to suppose that the remaining 15 per cent of the cases reported represent all of the cases in those cities under treatment by private physicians. Since clinics generally report increases in number of patients, it is evident that the question of whether there is a decline in the prevalence of these infections can only be answered by an inquiry as to the proportion of venereal disease cases treated by private physicians.

Again, as in 1921, many more cases of syphilis than of gonorrhea were reported. In the entire United States, in number of cases reported, syphilis exceeded gonorrhea by 14 per cent. This excess of syphilis cases is believed to be due not to a greater prevalence of syphilis but rather to the method followed in several states of reporting cases through the laboratories. In New York state, where this method is followed, 23,000 cases of syphilis were reported and 9,600 cases of gonorrhea; 71 per cent of all venereal disease cases reported were syphilis. This difference will probably continue to appear in venereal disease reporting as long as the assistance of laboratory tests is sought more often in the diagnosis of syphilis than of gonorrhea.

Scientific Research Continues

There has been little of peculiar interest in the general field, no outstanding experiments having

*Venereal Disease Control, Chapter 7, Report on Municipal Health Department Practice.

been undertaken in either hospital or dispensary. The United States Interdepartment Social Hygiene Board has for the last three years cooperated in carrying out experiments and researches, and favorable progress has been reported for some. Several of the researches have matured. Although it is expected that the volume of research will be much decreased through the withdrawal of federal appropriations, five of the institutions cooperating with the board plan to continue their efforts in scientific research. It is believed that there has been a reduction in the cost of treatment and a saving of life and health through the achievement of some of these researches.

Community interest in venereal disease control has not slackened, as evidenced by the report of the Charity Organization Society of New York City on its special study of its venereal disease problem in relation to the hospitals and dispensaries in that city. It is quite apparent from reading this report that the convictions of those who have complained that hospitals and dispensaries were not meeting the communities demands have been sustained. Further study by similar organizations of their own problems in various cities of the United States would undoubtedly show a considerable element of error in the method of approach of the case-working social agencies devoted largely to relief work. The attitude of the social worker in approaching hospital and dispensary officials or physicians needs that adjusting which can come only by an understanding of one's own job. In other words, it is quite evident that what the community relief organization needs to know about the individual in need of, or applying for, assistance is not the state of that individual's blood as evidenced by a Wassermann test, nor again the state of that individual's health as evidenced by the name of a disease, but an evaluation of the individual from the point of view of mental and physical capabilities. Is the patient a menace to the community? Is the patient a danger to his immediate family or intimate circle? And finally, is the patient's physical condition a handicap to the patient? If the hospitals will endeavor to inform the social agencies of the community of the need for the health evaluation of their venereal disease patient rather than a catalogue of symptoms, it seems reasonable to suppose that the charitable agencies will meet the situation half way and ask reasonable questions. In the main it is prognosis, not diagnosis, that is wanted.

Though having little bearing on the general situation, the issuing of the last volume of the Cleveland Hospital and Health Survey, entitled "Two Years After" is a feature of the year. Here we find a report claiming that the control of venereal disease has made very slight headway in the fifth largest city in the United States. An outstanding factor in venereal disease control work has been the attitude taken by the physicians of Cleveland as represented by the dispensary committee of the Cleveland Academy of Medicine. Pay clinics are frowned upon in Cleveland except for communicable disease in the acute stages which menace the public. Thus all cases of venereal disease in the acute stage are to be accepted by the institutions for either the regular or pay clinic services of the dispensaries. This means that there can be no question of dispensary abuse where the applicant suffers from an acute communicable disease. It means, further, that the medical profession has expressed its willingness to meet its responsibility insofar as dispensary work is concerned in relation to the protection of public health.

The 1922 report of the committee on venereal diseases of the public health administration section of the American Public Health Association presented a program which outlined the three most conspicuous projects for venereal disease control. These projects are still in the controversial stage and include the utilization of medical prophylaxis as a practical civil measure under the general treatment by the Pennsylvania plan. The commissioner of health of the state of Pennsylvania sent a message to the Public Health Association that medical prophylaxis, while valuable, was by no means the most important feature of an anti-venereal campaign. The plan of the Chicago health department to have its diagnostic, treatment and follow-up service used by all citizens irrespective of the citizen's relation to prostitution was presented and the difficulties of keeping out the old scheme of regulation of prostitution and certification of freedom from the disease soon became apparent and a cause for readjustment. Finally, will the application of business methods by a private organization lower the treatment cost so that adequate treatment may be made available for all comers at a fixed fee? The experiment of the Public Health Institute of Chicago is of interest to all hospital and health workers in that it parallels under private auspices attempts that have been made to establish pay clinics in the regular dispensaries.

During the year the greatest amount of emphasis of the educational field has been placed upon the "constructive" side of sex education and character building rather than a so-called negative phase of information regarding the diseases themselves.

A GROUP OF PROMINENT FIGURES IN THE HOSPITAL FIELD

(Upper left) Dr. Walter B. James, National Committee for Mental Hygiene; (upper right) Miss Mary Antoinette Cannon, president, American Association of Hospital Social Workers; (left center) Miss Octavia Hall, president, American Dietetic Association; (right center) Mr. T. B. Kidner, president, American Occupational Therapy Association; (lower left) Dr. Lawrason Brown, president, National Tuberculosis Association and American Sanatorium Association; (lower right) Miss Rena Eckman, president, Hospital Dietetic Council

The MODERN HOSPITAL

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THE BRIDGE BUILDER

A HIGHLY imaginative bit of verse that recently came to our desk pictures an old man fearlessly crossing a sullen stream at the bottom of a deep chasm, to which he had come in the cold gray of evening as he journeyed along a lone highway. Reaching the other side of the chasm in safety he built at eventide a bridge to span the stream. Ridiculing his effort, a fellow pilgrim chided him for wasting his strength in building a bridge over a stream he would never have occasion to cross again.

In answer:

"'Good friends, in the path I have come,' he said,
'There followeth after me today
A youth whose feet must pass this way.
This chasm has been as nought to me
But to that fair-haired youth may a pitfall be.
He, too, must cross in the twilight dim.
Good friend, I am building that bridge for him!'"

Perhaps for you 1922 has been a sullen stream at the bottom of a vast chasm. You have labored and struggled through it and you stand drenched and bedraggled, perhaps faint and discouraged, on the clean banks of 1923. What shall be your inspiration to new hope and revived strength? May it not be the picture of the aged bridge builder. What if in crossing 1922 you have had to struggle with the undercurrents of criticism and misrepresentation, or the surface waters of open opposition or seeming failure! Is it not worth your while as you stand on the verge of 1923, appraising the past and seeking to penetrate the future, to build your bridge—a hospital, a better school for nurses, a more efficient dietetic department or what not—not solely for your own satisfaction, or even for those who are now struggling through the sullen stream, but also for the pilgrims of the future—that great host whose journey will be the less dangerous because you have built a bridge.

A YEAR OF ACHIEVEMENTS

IT IS a good plan now and again to step back from the immediate task we have in hand, whether it be superintending a hospital, directing a social service department or what not, and review the larger aspects of our work. Such a practice enables us the more easily to evaluate our own particular job and gain renewed courage from a keener consciousness and clearer perception of the part we are playing in the larger whole.

With this thought in mind THE MODERN HOSPITAL places before its readers in this issue nineteen articles reviewing various aspects of the hospital field during the past year.

We can think of no better way to begin the

work of 1923 than to read these articles rather carefully. By and large, they tell a story of genuine progress. Here are some of the outstanding achievements: The publication of three notable reports, one dealing with the training of hospital superintendents, a second with nursing education and a third on the training of hospital social service workers; the successful meeting of the American Hospital Association at Atlantic City, characterized by an exposition of equipment and supplies twice the size of any previous exposition and by a group of well-thought-out reports on several practical subjects, notably one on the much mooted question of hospital flooring; the attainment of the 500 mark in the institutional membership of the American Hospital Association; the rapid standardization of the Canadian hospital field; the organization of the Hospital Dietetic Council, which will concern itself specifically with the dietary problems of the hospital; the organization in the American Association of Hospital Social Workers of a section on psychiatric social work; the crystallization under the second Langley bill of the program for the development of hospital facilities for the disabled veterans of the World War; the development of the pay clinic of the Cornell University Medical College; and the completion and publication of the survey of dispensaries by the American Medical Association.

Space will not permit the enumeration of other and equally significant developments. Suffice it to say that this brief list contains much that will send hospital workers into 1923 with renewed hope and revitalized effort.

ADEQUATE PHYSICAL PLANTS FOR MARINE HOSPITALS

THE United States Marine Hospitals, operated by the Public Health Service, represent one of the oldest activities of the federal government. Provision was made for them in an act of Congress passed 1798, and the first hospital was built in 1800 at Norfolk, Va.

At the present time this group of hospitals numbers twenty-four with a total bed capacity of nearly 3,500. With three exceptions all are general hospitals. There are, however, one sanatorium for tuberculosis at Fort Stanton, N. M., one leprosarium at Carville, La., and one immigrant hospital at Ellis Island, N. Y.

Owing to lack of funds the professional standards of these hospitals for many years left much to be desired. For the last few years, however, under the stimulus of the work done for veterans by the Public Health Service, the appropriations have been sufficiently generous to permit their reorganization with the introduction of equipment, personnel and methods in accord with good modern hospital practice.

Unfortunately appropriations for the improvement or reconstruction of the buildings and physical plants have not been available. Many of these hospitals are old, and their buildings are inadequate, unsuitable, or badly located. Good administration and proper care of patients are not entirely possible in such places.

The volume of work done in these hospitals and their related activities is sufficiently large to make them an important consideration in the hospital field of this country. During the last fiscal year this system of hospitals furnished care to about 34,000 in-patients and to over 134,500 out-patients and made some 86,000 physical examinations, to say nothing of other work. Persons treated were federal beneficiaries designated under the law.

The federal government should set standards in its hospitalization program and should not lag behind in its hospital activities. Every citizen should be able to feel a pride in the governmental hospitals of his vicinity; it is an essential part of his community interest. He should struggle for the upbuilding of federal institutions with the same spirit that he does for any other local institution of importance to his neighborhood. It is hoped in the near future that at least the more important of these hospitals may receive from Congress the attention and the funds which their importance deserves.

A very good start might be made at once in supplying the necessary funds for the enlargement and betterment of the National Leprosarium at Carville, La. (See article in November issue, page 412.) Congress adopted a wise policy in authorizing such an institution, but unless it be enlarged sufficiently to meet all demands, the expenditures already made will fail to achieve the real purpose of the legislation, which was the eradication of leprosy from the United States.

ON SALE "AS IS"

Not knowing how long the world war would last and in order to insure themselves an adequate amount of surgical and medical supplies our army and navy, during the eighteen months that we participated in the war, purchased vast quantities of these supplies. Such was the urgency of the times that they purchased them not only from long established manufacturers but in not a few instances from manufacturers of little or no experience, and under specifications designed to meet the exigencies of the moment.

When the armistice was signed they found that

there was a great surplus on hand. In due time steps were taken to dispose of this surplus. A division of sales was organized in both departments. It was the intention at first to offer these products to municipal, county and state hospitals but these sources of outlet, it was soon discovered, were too limited. Printed lists, with definite prices, were then sent to all the hospitals in the country. Later other lists were sent out on which bids were asked. More recently the supply branch of the office of the surgeon general of the army upon approval by the director of sales has been holding auction sales of surplus medical and surgical supplies, purchased or contracted for during the war.

Each auction sale catalogue stipulates that "all property listed in this catalogue at said auction will be sold 'as is' and 'where is', without warranty or guaranty as to quality, character, condition, size, weight or kind, or that the same is in condition, or fit to be used for the purpose for which it was originally intended."

This undoubtedly means that while some of the products thus thrust upon the market are satisfactory, others are of questionable quality and fall short of present standards. Manufactured four or five years ago, and subjected to various climatic conditions while stored in different warehouses, or in transit to Europe and back, many of these supplies have undoubtedly deteriorated. Surgical sutures may have lost their tensile strength and their sterility; chloroform may have decomposed; chemical compounds manufactured into tablets and alcoholic extracts of vegetable drugs may have disintegrated; liquid preparations may have fermented or precipitated.

Against the war department's sales of surplus surgical and medical supplies that conform to adopted standards we do not complain, but on behalf of the hospitals of this country we most emphatically protest against the practice of selling medical and surgical supplies "as is." The practice undeniably jeopardizes health, not to say life.

The bureau of chemistry of the United States department of agriculture is vested by law with the function of administering the provisions of the pure food and drug act, and no drugs should be placed on the market by the war department, or by any other department of the federal government, until they have been subjected to the tests, and have received the approval of this bureau.

Is it not singular that at the very time the government is selling its citizens and non-governmental hospitals medical and surgical supplies "as is," it is buying the same kind of supplies, freshly and perfectly made, for use in its own hospitals?

THE EIGHT-HOUR DAY

A STOCK argument against the eight-hour day for nurses and attendants in both general and state hospitals is that it gives these employes time which they will either waste or spend in unseemly conduct.

This argument has been borrowed from the industries who used it to combat the eight-hour day in their plants. It implies that the person who works is naturally depraved and must be restrained in some manner to prevent him from ruin. It implies a proprietorship by the employer in the time of his employe, in addition to an interest in his labor. So far as industry is concerned the argument has been dropped. Hospitals cling to it and try to put off the day when their nurses and pupils and other types of employes will work on eight-hour shifts.

The objection is also raised that a three-shift day means one-third more employes. Where it has been tried out thoroughly with the organization of economies and elimination of waste, the three-shift day has not substantiated the theory. This has been especially true in large state hospitals where the short day has been given a trial in good faith. It must not be forgotten that service is not always in numbers. Many a ward would be better off if fewer employes were in attendance and those left were more closely supervised or their duties laid out for them on a more economical basis.

ADDITIONAL REVIEW ARTICLES

THE number of articles submitted to us reviewing hospital developments in this country and abroad is so large that it has been found necessary to postpone the publication of three or four of the articles dealing with developments in foreign countries until our February issue. These articles cover hospital activities in Great Britain, Japan, South America, Holland, Germany and Austria.

Constant activity in your field of endeavor scatters the seeds of success in fertile soil; then continued effort generates life, develops growth and enables you to reap the harvest. You can't hope to enjoy the harvest without first laboring in the field and you cannot pluck the fruits of your true and native ability without constant and careful cultivation.

In sowing the seed of success there is no preferred season, the present is the accepted time, the wind and the weather are always on the side of the diligent, steady worker.

200 ARCHITECTS PLAN IDEAL SMALL HOSPITAL

INSTEAD of a local architect inexperienced in hospital construction, a certain small community employed 200 architects to work out plans for its new 30-40 bed hospital. These 200 architects were not from any one state or any one nation, but represented six great countries whose populations total more than 200,000,000. Many of them were leading figures in hospital architecture whose services commanded substantial sums.

To select from among these 200 designs, the most beautiful, the most efficient and the most economical, was a task too great for the superintendent and the board of trustees, but five persons of high standing in hospital architecture and hospital administration were chosen to give some days to a consideration of the respective merits of the plans. As can be imagined, their choice represented as near the ideal small hospital as had been developed up to the year of 1923.

A fairy story?

No!

THE MODERN HOSPITAL, through its $1,000 architectural competition, is accomplishing this very thing, not for one small hospital but for the small hospitals of America.

200 Architects Draw Plans

More than 200 architects from six great countries now are at work on the plans for a community hospital, and through the offices of this magazine, the best of their efforts will reach as far as the magazine circulates.

On December 15 when the registration for the competition officially closed, 212 architects had entered. Five more from England, whose letters were ambiguous, were tentatively registered, bringing the total of registrants from that country up to thirteen. In the final list of entries, France is represented; Belgium has a place; Spain will submit a design.

All the designs must be in the mails by February 1, so that by the first of March the last of the foreign designs should have reached the Chicago office of THE MODERN HOSPITAL. Immediately upon the last arrival, the jury of award will meet and begin its official rating of the plans. Dr. S. S. Goldwater of New York, Mr. Asa S. Bacon of Chicago, Mr. Clarence H. Johnston of St. Paul, Mr. William Buck Stratton of Detroit, and Miss Adelaide M. Lewis of Kewanee, Ill., will select the winners of the three prizes of $500, $300 and $200 and the two honorable mentions. Probably thirty or forty plans will be chosen for ultimate publication so that they will be available for reference at any time to superintendents and boards of trustees.

Geographical Distribution of Registrants

It is interesting to note the geographical distribution of the contestants. Among the ten states and countries having the highest number of registrations every section of the United States and Canada is represented, and England as well. New York with its preponderance of architectural firms far exceeds other states and nations in entries. The Middle West and the West tie for second place in the list.

The complete list of registrations, as to states and nations, follows:

New York	45	New Jersey	3
Minnesota	16	Washington	3
California	16	Idaho	2
Massachusetts	11	Kansas	2
Ohio	10	Louisiana	2
Illinois	10	Oklahoma	2
Canada	9	Tennessee	2
England*	8	Utah	2
Pennsylvania	8	Alabama	1
Mississippi	8	Georgia	1
South Carolina	7	Maine	1
Indiana	6	Nebraska	1
District of Columbia	5	North Carolina	1
Kentucky	4	North Dakota	1
Texas	4	Oregon	1
Arizona	3	Wisconsin	1
Iowa	3	France	1
Michigan	3	Belgium	1
Montana	3	Spain	1

*Five more tentative registrations.

Designs to be on Exhibit

Of the significance of this competition, much has been said. Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, in reviewing the progress in hospital planning and construction during 1922, says: "While the practical results of a recently announced architectural competition lie in the future, it seems appropriate to mention in a review of 1922 the competition which is being held by THE MODERN HOSPITAL for a small general hospital having a capacity of not less than thirty or more than forty beds. . . . The competition promises much for the future of small hospitals in America."

For the convenience of architects living in and near Chicago, all of the designs submitted will probably be placed on exhibit in that city.

The prize winning designs will be published in the April issue and they will be followed by articles on the organization and equipment of the small hospital.

THE RESULTS OF MODERN MEDICAL SERVICE IN STATE HOSPITALS

By A. L. BOWEN, Former Superintendent of Charities, Department of Public Welfare, State of Illinois, Springfield, Ill.

SUCH medical personnel and organization as have been outlined for state hospital service in two preceding articles in The Modern Hospital* will produce certain extremely desirable results. They may be counted upon, as bountiful crops may be expected from fertile soil after a favorable season.

The first result will be that medical staff morale so necessary to sustained scientific work. Morale will bud from the consciousness in each soul that he is connected with an institution or enterprise that is actually doing something and is chalking up each day some worth while accomplishment. The present deadness in scientific life of the state hospital and for that matter in all its functions is due to the absolute absence of achievement. The medical man's routine is dull. It consists in visiting once or twice a day the wards assigned to him, listening to insane people's reiteration of complaints, which he soon ignores, and prescribing a few harmless drugs. The inertia and lethargy that pervade the whole institution dope him into quiet submission. Morphine never more effectively quiets human energy than a short stay on the staff of a state hospital quiets the spirit of research and study. The reason is too apparent to require much elucidation.

Medical Staff Apt to Atrophy by Inaction

That there is plenty to be done, plenty to sharpen the wits and stimulate the thought and activities of every medical man has been indicated, I think, in preceding articles. But it is not taken advantage of; consequently there are no results from practice in these institutions, and medical men atrophy by inaction and idleness. Mental laziness is easily acquired and it is sure to be acquired when hopelessness is considered the goal of life.

The need for a head of staff who has the enthusiasm of the crusader and the will to do, no matter what tradition or experience may teach, has been mentioned before. Inspiration never rises from the staff to the superintendent. It must descend from the top. But such enthusiasm will be of little avail unless he can show results. It is not necessary to stir up the dead bones by poking among them with a stick or with rules and regulations. They will stir up and arouse themselves to action when they see the head getting somewhere with his work. Professional pride and ethics will begin to tingle. Those who are not affected by their chief's example and work should be dismissed and their places assigned to those who will give service in the spirit in which medical men should be trained and educated.

The second result will be improvement in the morale of the patients. It is surprising how they react to the slightest evidence of new life in the institution. They sense the presence of a live wire as soon as he enters the grounds. They know whether the superintendent has their interests at heart or not, whether he is determined to get service in their behalf, or whether he is time-serving and working first in behalf of the political crowd that put him in his position.

Every patient that goes to the hospital for surgical attention is an object of solicitude among those who know him. They watch for his return and, if he comes through well and enjoys greater peace of mind and less irritation, they all know it.

New Confidence on Part of Patients

Suppose all the operable human defects in an institution of 3,000 patients should be removed by successful surgery; what would be its effect upon the inmate population? They would look upon the surgeon with confidence. They would look upon the whole medical staff with confidence. What if all eyes and ears were treated? What if all who need glasses should be given them? What if all teeth that give pain and offense should be treated and cared for? Will any one doubt that the patient population would not arise to the situation with better conduct, more cooperation and a new faith? Where this program has been only partially carried out, it has produced most gratifying results in the wards.

How quickly patients go to work when they are given the opportunity and when pains are taken to find for them that which entertains and interests them. But work must not always be a hard grind in the field, in the kitchen or the shops. There are lighter occupations, recreation and diversion in scores of varieties, which must be interspersed with work.

Men and women who labor hard all day and return to their wards covered with prespiration are entitled to a shower and dry clothing, but few institutions provide these things or make them possible. Bath day is Saturday or Wednesday. There is only one Saturday or Wednesday in the week. That settles the bathing question for all alike.

Occupation and Recreation for Patients

The kind of medical service described will see to it that patients have what they need or should have in the way of occupation and recreation and those commonly accepted refinements of life. Where these have been granted, there has been improvement in patient behavior and morale.

One of Illinois' hospitals bought the white oak timber on a forty-acre tract, ten miles away. The superintendent recruited fifty hardy patients to cut the timber, saw and stack it. There was a live stream in the shade of the trees. Here after the day's work, the men were permitted to swim, and on coming out to put on dry clothing. A remarkable improvement in their whole attitude took place. For years some of them had been locked in closed wards in idleness. They took pride in seeing the timber cut, the giant trees falling, and the saw mill shaping the logs into lumber. They built barracks for themselves and there they lived for a year or more quiet and contented, with only a ride to the institution on Saturday for the dance or picture show.

The wonderful grove of trees was cleared and, back in the institution in the wood working shops, other patients began to make ward chairs and furniture, all hand work, strong and well finished and good to look at.

You may reply that the credit for this is due to the industrial and occupational departments. To a degree

*August and September, 1922.

it is, but above all in the institution is the medical staff. If it be dead, there will be no industrial, no occupational therapy, no improvements in service, no achievements in cures or recoveries.

A third result which is sure to follow will be growth of confidence on the part of the public in the hospital. There is nothing so helpful in the development of state hospital service as the confidence of the people. Manifestly it can not be gained, if the hospital is futile and impotent in its operations. The atmosphere which pervades its precincts will communicate to the outside and spread over the community. It can not hide its ineffectiveness nor can it conceal its effectiveness.

The public has a sixth sense akin to intuition. It knows, through this sense, whether its governmental agencies are giving service or simply playing politics. The community does not always rouse itself to its duty but it is not often fooled as to the facts.

The community knows whether patients from among its number are receiving beneficial care and treatment. Often one hears the expression among intelligent people; "they're not doing anything out there." These critics can not tell just what they mean, but they know that the institution is failing somewhere. They do not feel it their duty or province to know in what respect or why.

An institution which has not the respect and confidence of the community is bound to suffer for money with which to keep its doors open. The public, through its representatives, will not be disposed to grant money to provide enough employes, or enough food or a service to meet the requirements of the very lowest standard of care.

My own experience has been vivid on this point. The day is easily recalled when the Illinois general assembly, bitterly and brazenly partisan on nearly all matters, was niggardly in its appropriations to the state charities, because it knew they were political pawns and were not doing much for their inmates. Later on there was an improvement in service. How keenly the general assembly recognized it and how promptly it came forward with funds for new buildings and needed changes! As improvements developed money was easier to get in larger quantities. When assurance was offered that money would be spent for service to the patients and inmates and it was made clear that improvements would follow the expenditure of certain items, then the assembly was appreciative and liberal. The assembly only reflects the confidence or distrust that pervades its constituents.

A live hospital with a live staff, organized to do things that bring comfort and happiness to the patient and inmate, will be certain to make its connections with the community around about.

Its medical men will be active members in the local medical societies, in local community and civic affairs. They will be carrying on a dispensary and clinical service in the towns and cities of the hospital district for the benefit of those patients who are on parole or have been discharged, and for the benefit of those who feel that possibly they need an attention that the local practitioners cannot give.

These medical men will teach and develop public sentiment along lines of mental hygiene, dissipate the superstitions and fears which stand in the way, even in this intelligent age, of the solution of the problem of care and treatment of mental and nervous diseases.

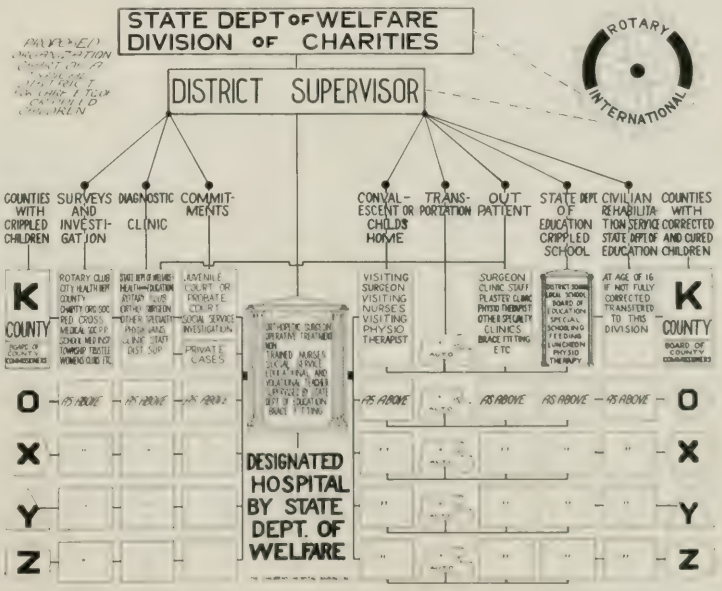
What a glorious day it will be when the public has the same confidence in its state hospital that it has in its little general hospital where its sick go freely and confidently, knowing they will get the very best care and the most skillful treatment the medical and hospital world can give.

This day will be here when the state hospital achieves. Achievement is up to the medical superintendent and his employes, including first of all the medical and scientific staff, who must be the leaders in thought and action.

PROPOSED PLAN OF ORGANIZATION FOR CARE OF OHIO CRIPPLED CHILDREN

Arthur O. Bauss, general superintendent of the Mary Day Nursery and Children's Hospital, Akron, Ohio, has devised a possible plan of organization to be used throughout that state in connection with the treatment and care of crippled children. The plan recently was submitted by Dr. Walter A. Hoyt, orthopedic surgeon, to a committee of the state department of welfare and to the Ohio Society for Crippled Children and was favorably received. The chart represents the organization of a typical district for the care of crippled children.

Ohio has provided for the care of its crippled children on a comprehensive scale. The Rotary Club, as in other states, has furnished funds to assist in carrying on the work.


STATE DEPT OF WELFARE
DIVISION OF CHARITIES
DISTRICT SUPERVISOR
ROTARY INTERNATIONAL
COUNTIES WITH CRIPPLED CHILDREN
SURVEYS AND INVESTIGATION
DIAGNOSTIC CLINIC
COMMITMENTS
CONVALESCENT OR CHILDS HOME
TRANSPORTATION
OUT PATIENT
STATE DEPT OF EDUCATION CRIPPLED SCHOOL
CIVILIAN REHABILITATION SERVICE
COUNTIES WITH CORRECTED STATE DEPT OF AND CURED EDUCATION CHILDREN
K
COUNTY
ROTARY CLUB CITY HEALTH DEPT COUNTY CHARITY DIRECTOR RED CROSS MEDICAL SOCIETY SCHOOL MED INSP TUBERCULOSIS WOMENS CLUB ETC
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VISITING SURGEON VISITING NURSES VISITING PHYSIO THERAPIST
SURGEON CLINIC STAFF PLASTER CLINIC PHYSIO THERAPIST OTHER SPECIALTY CLINICS BRACE FITTING ETC
AT AGE OF 16 IF NOT FULLY CORRECTED TRANSFERED TO THIS DIVISION
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O
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DESIGNATED HOSPITAL BY STATE DEPT. OF WELFARE

REPORT SHOWS EFFECT OF VENTILATION ON HEALTH AND EFFICIENCY

ANNOUNCEMENT is made of the publication* this month of the report of the New York state commission on ventilation. This study of the problems of ventilation, made possible through the generosity of Mrs. Elizabeth Millbank Anderson, of New York, extended from the fall of 1913 to the spring of 1917 and is the most elaborate and thorough investigation of the subject ever undertaken.

The first part of the report deals with studies aimed to solving the following problems:

1. What is the effect of the overheating, such as obtains in ordinarily occupied rooms, on the bodily processes and on physical and mental efficiency?
2. What is the actual effect on the body of carbon dioxide, and the chemical substances of expired air?
3. What is the effect of exposure to drafts and to low temperatures and, in particular, what is the relation between previous overheating and subsequent exposure to cold, on respiratory, bacterial infections and on catching cold?
4. What is the actual effect of dry air at high and moderate temperatures? Does dry air harm the membranes of the nose, promote infections and conduce to nervousness.

The general conclusions regarding the effect on health, comfort and efficiency, briefly stated are as follows:

Both the physical and the chemical characterization of air effect health and efficiency, but the physical condition of the air, particularly as it relates to its temperature, is the factor of prime importance in practical ventilation.

Harmful effects of overheating have been indicated through measurements of the circulation and body temperature, ability to perform physical work, and through observations on the nasal air passages and susceptibility to disease.

Moderate and high temperature (75 degrees and 86 degrees) especially when combined with high humidities, tend to interfere with the normal function of heat loss which gives rise to discomfort. A burden is thrown on the heat-regulating mechanism with a resulting increase in body temperature, an increase in the rate of breathing, and a fall in the general tone of the circulatory system. Besides, overheating leads to an abnormal reaction of the membranes of the nose, harming them permanently if long continued. Even after a comparatively short exposure when followed by a chill, it seemingly leads to conditions favorable to bacterial invasion of the air passages. Overheating when followed by a chill also tends to weaken the defensive forces of the body which are brought into play in coping with an invasion of infectious disease organisms, as shown by animal experiments.

The humidity of air, which is another of its physical characteristics, is also of importance in that a high moisture content of the air, especially when the air is warm, mitigates against heat loss through the evaporation of water from the skin. A high humidity will therefore reinforce the harmful action of a high temperature. On the other hand, low humidities, which have been accredited by many with being responsible for all kinds of mischief, have not been found to interfere with comfort, nor have they been found to induce nervousness or irritability.

The chemical conditions of air have been found to exert a secondary effect on the body as compared with the physical conditions. The air of a room without any fresh air supply, containing the odoriferous constituents arising from respiration and from the bodies of the occupants, was found to have no demonstrable effect whatever on comfort, body temperature, rate of heart, blood pressure, respiration and certain other carefully observed physiological functions. This air contained also large amounts of carbon dioxide. Further, freshness or staleness of air exerted no different effect on mental efficiency, the subjects doing as well in stagnant air as in fresh air.

In but two ways did stale air manifest itself as productive of a real and somewhat immediate effect. As compared with fresh air at the same temperature, vitiated air reduced the performance of physical work. The second and more important effect was on the appetite for food. The appetite was found to be measurably and definitely decreased as a result of breathing stale air. This effect is not to be minimized in view of the probably significant effect on nutrition, which might result from a diminished appetite for food extending over a long period of time.

It is concluded from experience of other investigations and from the extended researches of the commission that the primary essential for good ventilation is the maintenance of a proper air temperature of 68 degrees or below, but without the production of chilling drafts. At the same time, there should be an air change sufficient to avoid the accumulation of odoriferous or other substances arising from human occupancy. While the bad effects of stale air in the commission's experiments were obtained under somewhat extreme conditions (with a concomitant carbon dioxide content of from five to fifteen times that of fresh air), vitiated air cannot be declared free from any harmful effect.

Part II of the report, after reviewing the historical development of the art of ventilation, reports the scope, methods and results of most extensive studies of school room ventilating methods, of both the mechanical and window types. The various physical qualities of the air are studied under various methods of ventilation.

While this study is related to schoolroom ventilation there is much therein that will be found applicable to the ventilation of hospitals and other occupied spaces. The best methods of utilizing the windows for ventilating purposes are developed and discussed in detail, and specific recommendations as to the essential features of window and fan ventilation are stated.

There is every reason to believe that the window ventilation method may, with success, be applied to the general ventilation of hospitals. With cross ventilation provided in the wards the exhaust flues would not be required, except possibly in large wards. The use of the windows in wards and private rooms for the admission of air, in combination with radiation and window deflectors, as described in the report, supplemented with the mechanical exhaust system customarily provided for toilets, serving kitchens, and utility spaces generally may be adapted to the hospital with successful results in many cases.

A careful study of this report will well repay the student of the physiological influences of ventilation and will prove helpful especially to those interested in the ventilation of schools and hospitals.

*E. P. Dutton & Co.

GRACE HOSPITAL NURSES HAVE ISLAND HOME FOR VACATION USE

By W. L. BABCOCK, M.D., Superintendent, Grace Hospital, Detroit, Mich.

A BEAUTIFUL home on Elba Island, in the Detroit River, was purchased by Mrs. Helen N. Joy for the use of pupil nurses of the Grace Hospital, Detroit, on weeks ends and during their vacation periods, if they desire to avail themselves of its use. The house was entirely rebuilt and remodeled to accommodate comfortably thirty nurses at a time. It also has emergency provision for twenty additional, giving it a total capacity of fifty nurses.

This home occupies an elevated position on a bluff overlooking the mouth of the Detroit river. The large grounds and spacious verandas make it an ideal playground for tired nurses. Other buildings include a caretaker's cottage, garage, stable for pony and ice house. The grounds are several acres in extent. A large garden, ample in size, is a part of the property. There are a large number of shade trees on the grounds, and in addition sixty fruit trees, including apple, pear, cherry, plum and mulberry trees. A dock for boats and a bathing beach are features of this summer home.

Pupil nurses from the Grace Hospital Training School for Nurses from May to October 1 are sent to the home in groups of thirty. The hospital maintains an automobile service between the main hospital and the west side branch hospital, and the summer home. The home is in charge of a caretaker throughout the year, and a housekeeper, cook and maids are employed during the vacation months.

A very inviting place for week end and vacation stay.

The residence is of the colonial type and its verandas and sun porches are ideal places for tired nurses to lounge about.

The hospital seems delightfully remote at this island vacation home for nurses.

Nothing will put a man in tune with the universe and keep him in perfect harmony with its work like getting on the job early in the morning and taking advantage of the full day that nature provides out of every twenty-four hours. Work is a natural habit of man—the best one he can have in business—and when he acquires that habit and makes it a part of himself everything else seems to work out to his liking. There may be variations in the net results of the day, but the sum total of the months and years will work out right by a mathematical equation. That is a law which will govern you and me in whatever we do.

"The art of fine living consists of the greatest intellectual development and the most worthy social service possible, without loss of power to continue the race adequately, to enjoy life fully and be a source of happiness to others."—Dr. J. F. Williams.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Department of Nursing Education, College for Women,
Western Reserve University, Cleveland, Ohio

COOPERATIVE PUBLICITY

DURING the last few years there has been a decided change in the attitude of schools of nursing toward the whole question of publicity. Not so long ago each school was more or less isolated, felt it was complete within itself, and did not recognize the need of affiliating with other schools for any purpose whatever This isolation is gradually breaking down, due first to the plan of affiliating a number of schools, in order that the nursing experience offered the students shall be complete and inclusive of at least the four major branches, i. e., medicine, surgery, pediatrics, and obstetrics. Second, the lack of a sufficient number of students is proving a tremendous factor in bringing the schools together.

Due to many and complex causes, there is an almost universal demand for a larger number of students than the schools are able to attract. The significance of this fact is that the students in schools of nursing represent to a greater or lesser extent the working force of the hospital with which the school is connected. The majority of hospitals are philanthropic institutions, and depend in a large measure upon voluntary contributions for support. Many of them face an annual deficit which may or may not be made up by some generous friend.

Hospitals Realize Value of Schools

It is only since the shortage of student nurses has become acute that hospitals have had any realization of the value of the contribution made by the schools in the form of work exacted of the students. Many of the hospitals are finding it difficult to obtain workers to perform this necessary labor at any price, much less the limited price that the majority are able to offer. Consequently, the hospitals are facing a most difficult problem at a time when the demands made upon them are increasing almost daily, for never before has so large a proportion of our people depended upon the hospitals for care in time of illness, and never has that care been so generally appreciated as at present.

Coupled with these conditions is a persistent demand for an increased number of graduate nurses, for many and varied forms of community service, and for these the prospective nurse needs to know many things in addition to the bedside care of the sick. For, fundamental as we are ready to grant this bedside care to be, a knowledge of how to prevent disease must go hand in hand with it, and the hospital which is not in a position to teach the student nurse, not only the things she needs to know to make her economically valuable to the hospital, but also the things she needs to know to meet the varied and complex demands made upon her after she leaves the hospital, is not justified in attempting to conduct a school. For, after all, the argument has always been that the student was paid for her labor in terms of education, but if that education is adequate only for hospital needs and not the needs of future life, then truly it falls short of what the student has a right to expect.

Many claim that schools of nursing are failing in just this respect, and various remedies are being suggested, ranging all the way from "three months training," to that of university connection and a course of five years, leading to a Bachelor of Science degree and diploma in nursing.

It is interesting to speculate on the differences of opinion represented by the advocates of such widely divergent remedies, and it is not surprising to find schools of nursing combining to study their problems, to maintain such standards as they consider essential and to honestly advertise the opportunities they offer. So, discouraging and difficult as many of our problems are, it is tremendously significant to find the representatives of several schools joining hands and coming together.

Aim to Raise Educational Standard

The first example of this was the Central Council for Nursing Education, with headquarters at 116 South Michigan Avenue, Chicago, Ill. The following statement outlines their purpose.

"The Central Council for Nursing Education has for its object the raising of educational standards in schools for nurses, and the recruiting of young women with good educational background to take up nursing as a profession. This movement has been brought about by the very serious shortage of student nurses, which threatens, in the near future, to make difficult the adequate care of the sick in institutions and homes."

Taking the Central Council as a pattern, an Eastern Council was organized on similar lines. Starting with a group of six representative schools in New York City, five others were added during the first year of work. The membership now includes representatives from seven schools in New York City; one each in Brooklyn, Troy, Hartford, and New Jersey. The purpose of the Eastern Council is to secure pupils for the affiliating schools through frank and persistent advertising, by means of the printed letter and spoken word. Headquarters are at 24 Fifth Avenue, New York City.

A third group has been organized in Philadelphia, with headquarters at 221 South 18th Street. This is known as the Council for Nursing Education of Southeastern Pennsylvania.

Still another organized group has headquarters at 2157 Euclid Avenue, Cleveland, Ohio. This now functions as

"The Committee for the Advancement of Nursing Education," although first known as the "Student Nurse Recruiting Movement." It is sponsored by the Ohio State Nurses' Association, District No. 4. In this respect it differs from the three first listed, the committees of which include hospital trustees, training school and hospital superintendents and some interested lay-members.

Now that local cooperation has been gained in those more or less stable groups, it is not too much to hope that a United Council may some day be formed, with a nation-wide membership for nation-wide publicity regarding nursing. One of the first steps which such a council should take is the formulation of a simple grading for schools of nursing, and a classification of existing schools. At the present time we have nothing so tangible to offer the prospective student of nursing as a guide in the selection of a school.

In all of these organized efforts for constructive publicity, attempts have been made to get the reasons for the popularity of given schools. The superintendent of a well-known school in New England has outlined for us the way in which that school has been filled by giving the student a square deal professionally, and by a realization of the responsibility of the school toward the individual, personal development of each girl.

Given: A young woman in her last year of high school —beginning to think what she is going to do when she finishes. She does not want to teach, office work does not appeal, someone has spoken appreciatively of a graduate nurse who has been a real help in times of distress. Possibly she has seen this capable looking woman, possessing poise and what appears to her great knowledge of mysterious and interesting things. Such is often the beginning of a desire to train.

Other members of the graduating class are discussing the relative merits of technical and professional schools which they hope to attend, and this young woman begins to gather information about schools of nursing. Probably the family physician and graduate nurses of her acquaintance are consulted and circulars of information are collected. Many of these state the essentials of good schools. Thus, from one source and another, considerable information is gained.

About this time everyone tells this young woman that training to be a nurse is the hardest thing she can possibly do. She is told this by her family physician, by the graduate nurses consulted, by her mother, and in capital letters by her father. Fortunately for the sick, many such young women persist in their desire to train, and enter schools of nursing.

Realizing that the training is hard, much of it seemingly very unpleasant, this young woman is keen to secure an intelligent understanding of disease and its treatment, because only by a knowledge of the ultimate aim can the hard and disagreeable details of the work be attended to cheerfully.

Must Have Theoretical Background

It is unlikely that she will do the hard work required unless it is accompanied and vitalized by theoretical instruction. There are pleasanter and easier ways of earning a livelihood, and without theoretical background, nursing is just "rule of thumb" work, and the hardest possible way of earning a living.

Therefore the thinking young woman chooses the school that teaches: (1) something of how to perform nursing procedures with finish and fine technique; (2) something of the history and ethics of nursing; (3) something of the relation of the patient to the community; and (4) something of pathology and therapeutics.

After reading the circulars of information, she decides to visit several hospitals, and makes appointments with the principals for personal interviews. The wise principal will give that possible applicant her undivided attention. She will explain the reciprocity existing between the student and the hospital. The principal will herself, or at least have one of her assistants, take the young woman through the hospital and the nurses' residences. The real plan of the hospital will be explained, so as not to bewilder the young woman. Of course the good points will be shown, but there should be frankness concerning conditions that may be improved. Be square, if the probationers have less desirable quarters than the seniors, don't allow her to think she is going to have a senior's room. If the mother comes with the applicant, draw out and clear up all points that are worrying her.

If she goes home and sends in an application, acknowledge it by a personal letter. If there is delay in gathering data, write a personal letter of explanation.

The young woman enters. Keep faith with her. It is of little use to admit students unless they stay. One school shows the yearly average number of applicants admitted from 1911 to 1915, inclusive, to be ninety-four, and the average loss to be thirty-seven, the yearly average number admitted 1916-1920, inclusive to be eighty-nine, and the average yearly loss to be nineteen. It is easy to see why the census of the school has steadily increased, although the number admitted has decreased.

The pupil expects to find the instruction, which she has seen outlined in the circular, given. She generally finds it, but she also often finds that she must work so hurriedly on the wards that she cannot carry out the nursing procedures the way she has been taught. One reason for this is the amount of housework she has to do. The combination of these two factors is the most discouraging element of her training course. She cannot see why she is put at maid's work when the patients need her so badly. She sees new buildings and new equipment, but no apparent effort to relieve her from overwork. In fact, such improvements often mean additional work for her.

All work and no play makes for inefficiency and discontent, not to mention homesickness. A critical period may be tided over by a party, in fact several parties. That school gains a hold on its students when it gives some thought to systematic recreation. The young women of today will not accept all work and no play. They want enough play to give zest to their work; they have a right to expect a suitable place to receive their friends, and this includes men as well as women friends. Celibacy is not held out as one of the inducements to enter training, and the failure to recognize the normal desire of young women for friends of the opposite sex is a failure that does not suggest great wisdom on the part of those credited with the knowledge of how to conduct schools.

After a time the student may fall ill. She has worked faithfully, loyally and well. The tables are turned. She is the patient. She has been taught to be thoughtful and considerate of the ill. Example is more far-reaching than precept. It is a wise principal who sees that every attention and courtesy are given that student-patient, and that she receives what you expect her to give others.

Some day there is reason for discipline. It is wisely administered, no one is made unhappy by it; if it is of any arbitrary form, the pupil wishes she had never trained. Probably principal and pupils are much happier under some form of student government, which has to do, however, with off-duty affairs only.

Months roll by and the student is wondering if she is going to get an all-round experience in all the departments of the hospital. She realizes how difficult it is to manage this when the patients must be cared for by the student body, but she has a right to expect an honest effort on the part of the principal to give each student her due.

At last she is through, and if she finds herself well prepared, and has lived in the kind of atmosphere that the best schools of other kinds try to create, lived under a sensible discipline and been well cared for while ill, she forgets the hard part of it all and steps out into the world recommending others to go and do likewise. The best advertisement of any school is found in the satisfied, loyal, and efficient graduate.

An analysis of this paper brings out very clearly a number of points of interest to all schools.

(1) The importance of the successful graduate who is efficient and capable, as an advertising medium.

(2) The strategic position of the "family doctor" and the graduate nurse, whose advice is almost always sought.

Circulars of Information Valuable

(3) The value of circulars of information that state the essentials of good schools, and give accurate, detailed,

up-to-date information, in contrast to the stereotyped form which leaves much to the imagination.

(4) The value of a scientific background regarding disease and its treatment in enabling the student to get a complete picture of what is being attempted. This helps her to realize the importance of apparently petty details that are links in a chain on which success or failure often depends. To expect student nurses to do routine work that is often disagreeable, without any knowledge of its relation to the treatment of the whole case, is as futile as to expect the industrial piece worker to be cooperative about his particular task when he does not know its relation to the finished product.

(5) The necessity of planning curriculum so that it will cover more than just bedside work.

(6) The value of the personal contact of the superintendent and the prospective student, and the advisability of absolute frankness and complete understanding between the two, coupled with courtesy and patience.

(7) The value of keeping faith with students. Too much cannot be said in condemnation of the practice with which some schools have been credited, viz., admitting large classes and weeding out about one-third of the number admitted. The influence of the rejected students in their home towns is certainly not such as to encourage other young women to enter training.

(8) The realization that the dissatisfaction resulting from overwork is an exorbitant price to pay for housework, and though the payment may be long delayed, it is ultimately exacted. Many are of the opinion that the present shortage of applicants is part of the price that hospitals are paying for such student exploitation as has been practiced in the past.

(9) The value of social activities and definite provision for recreation.

(10) The importance of adequate care during illness given ungrudgingly, and, one might add, without the necessity of making up all the time so lost. Industry has found it profitable to allow two weeks sick time in addition to a vacation each year. Our national government also allows this time. Can so-called schools continue to do less, when the students are daily exposed to various infections? At the time of the influenza epidemic students who contracted the disease were obliged to make up the time so lost, and yet the very nature of their work made them particularly liable to infection. Was this wise?

(11) The desirability of administering discipline in such manner that no one is unhappy about it. Is this practical? Can it be done? The following quotation from an article published in a daily paper in one of our large cities suggests that the whole problem of discipline is one that needs to be studied carefully: "Any woman who is ambitious and determined to finish, surely must be of strong and enduring personality to persevere, and also submit to the severe and often unjust criticisms heaped upon her during her weary hours of labor."

This last is an example of the destructive publicity which is responsible for much prejudice against nursing schools.

There is an atmosphere about some schools which is deadening to personality, and in which the student becomes an adept in the art of "getting out from under." The superintendent of the school is subjected to harsh criticism from her superior officer; this in its turn is handed down until the youngest probationer feels the hostile air, "someone has blundered." I wonder if a student ever goes to the office without feeling, "What have I done, now?" Democracy is needed in our schools, and human sympathy and understanding.

The hopeful phase is that probably no time in the history of nursing have the schools so subjected themselves to critical analysis, and it is through frank discussion and comparison of methods and results that progress is being made. Cooperation is the keynote in the organized efforts to attract students to our schools. It should be the keynote in the schools themselves. "All for each and each for all"—is a good motto for students, teachers and executives alike. All that the hospital and school can give to the student to enable her in turn, to give the best that is in her during her days of training to the hospital, and as a graduate nurse to the larger community which she shall serve. Such nurses furnish the best type of publicity for any school.

AMERICA'S FIRST TRAINED NURSE

Miss Linda Richards was the guest of honor of the New England hospital for Women and Children at Boston during the recent celebration of the fiftieth anniversary of its training school and the sixtieth anniversary of the founding of the hospital. Miss Richards was the first woman to be graduated from the training school and is known as the "country's first trained nurse."

Miss Richards upon graduation was called to Bellevue Hospital, New York, where she became assistant to Sister

(Keystone View Co.)

Helen, the English nurse who organized its school for nurses. From there she returned to Boston to organize the training school of the Massachusetts General Hospital, later performing the same service at the Boston City Hospital. She was at one time a missionary in Japan and organized the first school of nursing for Japanese women.

With Miss Richards in the picture are Miss Lillian Beck (left) and Miss Clara du Brau (right).

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

THE DIETITIAN AND THE DIABETIC*

By ELLIOTT P. JOSLIN, M.D., Boston.

IN "THE Merchant of Venice" a great deal is said about the priceless value of a certain pound of human flesh, but nowhere does Shakespeare mention what is dearest to the dietitian and the diabetic, its caloric value. The caloric value of a pound of human flesh has always had a peculiar fascination for me and since a good deal of misconception exists about it may I tell you of my quest to learn its worth.

At first this seemed a very simple task, because it is generally accepted that the body is made up of about 60 per cent water, 20 per cent fat, 15 per cent protein, 1 per cent carbohydrate and 4 per cent of salts. A little reflection, however, shows that the calculation of the value of a pound of body-weight from such figures would be erroneous, because in dealing with weight gained and weight lost brains and bones are not added and subtracted in proportion, yet they are included in total body-weight. What dietitians and diabetics really wish to know is not the value of the average pound of body-weight, but rather the value of Shakespeare's pound of flesh which sometimes is added and sometimes removed from the body as a result of diet or disease.

Weight Lost Progressively During Fast

A fasting man loses weight progressively as the fast continues. He represents an example of loss of weight uncomplicated by the question of diet. To be sure the loss of weight is rapid for the first three or four days, and again would be rapid toward the termination of the fast if that was continued to a fatal issue, but in between these extremes the loss in body substance is gradual and fairly uniform. The scales and calorimeter enable us to learn what this loss is from day to day and of what it consists. At the nutrition laboratory in Boston some years ago, opportunity was afforded to study the loss in weight and the character of body material burned by a healthy man who fasted for thirty-one days. The data then acquired afford us the necessary basis for our calculation of the caloric value of a pound of human flesh.

The loss in weight of this fasting man, L., was uninterrupted, and on no day did he fail to lose. On the morning of the first day his weight was 60.6 kilograms and at the end of the fast 47.4 kilograms. Excluding the first four days during which his loss was proportionately more rapid he lost on the average for the remaining 27 days 0.6 per cent. of his body-weight each day. It is worth while to remember this figure and ever to bear in mind that whenever food is withheld from an individual for twenty-four hours the loss of that individual's body-substance for that day will be approximately 0.6 per cent of his actual weight. In practice he may seem to gain or lose because of water retained or excreted, but under ordinary conditions of hospital life the rule will be found to hold that a day spent without food means the sacrifice of 0.6 per cent. of the weight of the patient. Extraordinary circumstances alone justify such a loss, especially in an undernourished individual.

Calorimetric observations were made upon the fasting subject, L., at repeated intervals during the day and throughout the night for the entire fasting period. In this way a knowledge of the heat which he produced was obtained and the caloric equivalent for the entire twenty-four hours determined.

During the thirty-one days of the fast the total output of heat was 43,010 calories. The loss of weight for the same period was 13.2 kilograms. Each kilogram of body-weight thus lost represented therefore an equivalent of 3,258 calories. Calculating the output in calories for the last twenty-seven days each kilogram lost would represent 3,766 calories. Subsequently, a healthy nurse who submitted herself to a diebetic diet for a period of three weeks was investigated and it was found that the equivalent of each kilogram of weight which she lost was 3,171 calories. From these observations a pound of body tissue may be stated therefore to be equivalent in round numbers to 1,500 calories.

Pound of Body-Weight Equals 1,500 Calories

The calories lost by L. for each kilogram decrease in body-weight during fasting probably represent with a fair degree of accuracy the calories lost by a diabetic subject under similar circumstances. It is unessential for our purpose whether the exact number of calories lost varies plus or minus 5, 10, or 15 per cent, but it is essential to realize that the loss of a pound of body-weight means a loss of at least 1,500 calories. All clinicians are in practical agreement today that over-nutrition must be avoided in diabetics. It is seldom that more than 5 or 10 per cent of surplus food can be taken by a diabetic patient for any length of time without injury to his carbohydrate tolerance. This being true, it is evident that a loss of a pound in body-weight, or the equivalent of 1,500 calories, by a patient whose metabolism is also 1,500 calories, would require 10 days for replacement, at 150 additional calories per day, providing the patient could take an excess of 10 per cent of calories per day, and 20 days if he

*Paper read before the recent annual convention of the American Dietetic Association in Washington, D. C.

could bear but 5 per cent or 75 calories daily in excess. Is it therefore strange, that a loss of a kilogram of body-weight by a diabetic patient is seldom regained?

These observations upon the caloric value of a pound of body-weight are applicable to all and not to diabetics alone. If a patient loses a pound of body tissue we know he has taken 1,500 calories less than he needs; if he has gained a pound of body tissue he has eaten at least 1,500 calories more than was required. If a patient requires 1,-500 calories a day and receives but 750 calories in his diet, he will lose one-half a pound of weight that day and he will gain one-half a pound, if he takes 750 calories more than the required 1,500 calories.

It is needless to say to this scientific assembly that in these calculations I have omitted entirely any allowance for the specific dynamic action of foods, particularly of protein. What I am after is to bring out the one point that body-weight must be conceived in terms of calories.

With a knowledge of the total heat output in calories, the respiratory quotient and the nitrogen excretion it is possible to apportion the value of carbohydrate, protein, and fat burned in the body during the interval of the observations. The computations of body material lost during the entire 31 days by L. show that each kilogram of body-weight was represented by the combustion of carbohydrate 15 grams, protein 126 grams, and fat 277 grams. The remaining 582 grams consisted of water and salts. You will note that the protein burned was less and the fat burned more than the percentages which these constituents hold in the body as a whole.

Interesting observations upon the relative values of carbohydrate, protein, and fat furnished by the body and by foods have been made recently by DuBois and Richardson and the publication of their results will awaken your keenest interest. It is sufficient to say here that in a prolonged fast one can estimate that a kilogram of flesh is represented by components approximately as given above.

Attitude of Dietitian Toward Diabetic Diet

Unfortunately, the treatment of diabetes today does not rest upon basic principles as securely founded as the caloric value of a pound of body-weight, and herein danger for the dietitian lies. Brought up as she often is in a single institution with routine ways it is easy for her to believe that the method of treatment employed in that particular hospital is the one and only method desirable. Should this view hold, it would be lamentable. It is true that Christian reached his heavenly goal only when he followed the straight and narrow road, and attempts by other paths always met with disaster. This is not the rule in the treatment of diabetes. There are many roads all leading to the same end. Furthermore, various methods with identical cases apparently produce equally good results, and he is narrow-minded indeed who is unable to recognize the good results of the methods of others no matter how radically they differ from his own. As the dietitian in her peregrinations wanders from hospital clinic to hospital clinic, she should remember this and not be discouraged or discourage patients who are following dietetic lines different from her own. One can almost say in diabetes any fairly good method of treatment yields good results in the hands of its originator because with the method goes zeal in its execution and an interest in the patient's future. It is fundamental that this idea should be entertained, because the attitude of the dietitian goes far in promoting a proper morale in her institution.

It is not so long since that the function of the dietitian was to prepare delicacies for the rich hospital patients. Today, her function has completely changed, and every single individual in the hospital is dependent upon her skill in adjusting supply to demand with a dwindling budget, so dependent that one need not enlarge upon her enlarged duties along some lines which are well-recognized, but I would emphasize an important part of her mission, namely, the education of the diabetic and his family.

The education of the diabetic is infinitely more valuable than any dietetic treatment given while in the hospital. The food which the dietitian gives the diabetic in the hospital can serve him only for a few days or weeks, but the education which the dietitian gives the diabetic in the hospital must serve him for life. If this education is not thorough, not only the funds of the patient and the hospital are wasted, but a life unnecessarily shortened.

The education of the diabetic must be individualized, and it is the duty of the dietitian to see that this is done. A patient who cannot read or write frequently does better than the one with college training after a course of hospital treatment. The former patient usually has a good memory, and if the details of diet are taught in simple, visible form, they will not be forgotton, and the patient will carry them out to the letter, fearful of the results which might ensue if the advice which has been given is broken. Indeed, the only difficulty with such patients is that they follow the diet too minutely.

Dietary Methods Should Be Simple

All successful dietary methods are simple, and the simpler they are the better and the more universally will they be adopted. Today the majority of diabetic patients are so nearly well that their role in life is active, and they have little time for the minutiae of diet. Wherever possible, they should be spared such details. For this reason one should avoid as many calculations as possible and utterly banish all useless calculations. When I see a diabetic patient laboriously reckoning out to the decimal point the percentage of fat in corned beef or bacon, it simply makes me boil with anger, that diabetics should be so abused. Any sensible person knows that it is impossible to tell nearer than a few whole grams the quantity of fat in a portion of bacon, corned beef and often of other foods, and to waste the diabetics' energies struggling with decimals is simply wicked. I beseech you use as little arithmetic as possible.

Individual Portions of Standard Foods

Standard foods should be encouraged. That is why certain well-known articles such as shredded wheat, uneeda biscuits, and recently a preparation of gelatine of known weight sufficient for an individual portion, are of such value. With the content of carbohydrate, protein and fat in these standard foods known, weighing is rendered needless. If oatmeal was standardized as universally as one of the wheat preparations, it would be an enormous boon to the diabetic. Each year you dietitians should see to it that a standard universal food is added to the list for the diabetic meal. Can you not give the diabetic some new safe measures for his principal foods? Might one not estimate by inches in length or circumference the food content of bananas, grape fruit and oranges with reasonable accuracy. Think how much easier it would make it for the patient when travelling.

Delicacies for diabetics are usually wasted. Plain foods are the best. The diabetic who lives on cabbage month in and month out often is the most successful. The substitution of lettuce with its known small carbohydrate

value for washed vegetables with their variable carbohydrate content has been of the greatest possible help. Cabbage and salt fish on a schooner at sea have brought a patient's blood sugar to normal when my hospital diet failed.

Should Encourage Diabetic Classes

Diabetic classes are to be encouraged, and should be of at least three types—one for the doctor, one for the nurse, and a third for the dietitian. All should be coordinated. The doctor can drive home the good results obtained when treatment is followed and the bad effects when treatment is disregarded. The nurse can answer questions and teach the patient how to live, reinforce the doctor's advice, and teach the diabetic school, calling upon each patient to recite. It is reserved for the dietitian to be the demonstrator and to exhibit in graphic form the plain foods which are useful to the patient and the methods by which all foods can be most successfully employed. Economy in purchase and utilization should receive especial attention. These three types of classes are most important. They create that sort of hospital atmosphere which makes it worth while for doctors to send their patients for treatment and at the same time make the labor of the teacher productive and stimulating. A single diabetic patient taught well in such an environment means that a multitude of diabetic patients profit who never enter hospital doors. Nearly all diabetic patients are eager to learn and also doubly eager to teach. Give them a chance!

I hope you have heard of my Louisa Drumm. March 30, 1920, she came to the office and was given the usual examination with suggestions for treatment, and as it was impracticable for her to enter the hospital, she was taught on the spot the diabetic diet and how to examine her urine. She went home, shortly after contracted pneumonia and died. But in the intervening days amid her household cares she found time and took enough interest to examine the urines of ten others in her boarding house, and in so doing discovered the presence of diabetes in a boy. She gave him sound advice, sent him to his own physician, who also subsequently died, and later the boy came to me, telling this story. On the day she learned the diet and Benedict test and made these ten urinary examinations for her friends, Louisa Drumm was 79 years and four months old! Her case is not exceptional. Within the last month another woman who was 78 years of age could not be prevailed upon to leave the office until she, as well as her daughter, had learned the Benedict test.

Young hospital house officers and busy doctors often save their time and protect their ignorance by writing diabetic prescriptions such as this—carbohydrate 50 grams, protein 60 grams, fat 100 grams—instead of itemizing the foods. For this I have little use. I know it educates the dietitian, but it seldom educates the diabetic or the young doctor, and frequently neither are one whit wiser when they leave the hospital than when they enter. Both should be grounded and drilled in the exact quantities of food which they wish to prescribe, or wish to eat. Don't encourage the doctor to educate you instead of the patient.

Diabetic boarding houses and diabetic restaurants are to be promoted. The majority of diabetic patients do not need hospital care, they need boarding house care. Anything you can do to provide or take charge of diabetic boarding houses for diabetic patients will be helpful. Such homes are successful because the patients are grouped and can go to the kitchen receiving individual instruction. Hospital patients should be grouped as well, both for educational and administrative purposes.

Routine Diabetic Treatment

Purposely, I have left to the last a few brief words about my own methods, largely the good ideas of others which I have appropriated. A good many different types of diabetic treatment have been employed by me in the last twenty years, and it is my hope to employ a good many more methods in the future. Each method I adopt I believe better than the last, but no sooner have I begun some plan than its faults begin to show, and the opportunity for improvement appears. That is the charm of the game. It indicates progress. The present method which I dare to advocate for extensive house and hospital

The Test Diets are designed for the period during which the patient becomes gradually sugar free. On successive days advances can be made from Test Diet 1 to Test Diet 5, and if on the fifth day the patient is not sugar free, fasting can be employed for one or more days.

The Maintenance Diets are for use so soon as the urine of the patient is free from sugar. If this occurs as a result of Test Diet 5 the patient begins with Maintenance Diet C_1 PF_1. The actual articles of food representing the carbohydrate in the diet for the first day are given under the heading of carbohydrate, for convenience described C_1, $_2$, $_3$, etc. The articles referred to under protein and fat are under that heading, which for the same reason is described as PF_1, $_2$, $_3$, etc. Certain cases of diabetes can proceed steadily day by day from C_1 PF_1 to C_{12} PF_{12}, without showing sugar. If sugar does appear in the urine, drop back two days in the carbohydrate group, wait till sugar free, then advance in the protein and fat group until sufficient calories are obtained. Thus, if sugar shows on C_7 PF_7 the diet prescribed would be that included in C_5 PF_7 and thereafter progression could be made in the PF group until twenty-five to thirty calories per kilogram body weight were furnished the patient.

Occasionally the patient becomes sugar free on Test Diet 2, 3, or 4. It is then unnecessary to begin with Maintenance Diet C_1 PF_1, but instead with a maintenance diet which contains a value for carbohydrate similar to that of the test diet upon which the patient became sugar free.

If the protein and fat are too high for the individual on a given day it is easy to advance the carbohydrate and decrease to an earlier day on protein and fat.

The plan is arbitrary and the majority of cases will demand some modification. It is arranged to enable patient or nurse to see in advance the general plan of treatment.

DIABETIC DIETS

Diets with which to become Sugar free	Diet in Grams				Test Diets													Name of Diet
	Carbohydrate	Protein	Fat.	Calories	5% Vegetable	Orange	Oatmeal	Shredded Wheat	Uneeda	Potato	Bread	Egg	Cream 20% fat	Bacon	Butter	Meat	Fish	Skimmed Milk	
T. D.1	189	89	15	1247	300	300	..	1	.....	240	90	.....	.....	.....	.....	90	120	480	1
T. D.2	102	58	0	610	300	300	..	1	.....	120	.....	.....	.....	.....	.....	.....	180	300	2
T. D.3	64	33	0	388	300	300	..	..	.....	60	.....	.....	.....	.....	.....	.....	90	240	3
T. D.4	38	27	0	253	300	200	..	..	.....	.....	.....	.....	.....	.....	.....	.....	90	120	4
T. D.5	15	5	0	80	300	50	..	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Maintenance Diets					**Carbohydrate (C)**							**Protein and Fat (PF)**							
C1 + PF1	10	11	0	138	300	.....	..	..	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
C2 + PF2	22	13	18	302	300	100	..	..	.....	.....	.....	1	60	..	..	.....	.....	.....	2
C3 + PF3	32	24	24	410	600	100	..	..	.....	.....	.....	2	60	..	..	.....	.....	.....	3
C4 + PF4	42	29	30	645	600	200	..	..	.....	.....	.....	2	60	30	..	.....	.....	.....	4
C5 + PF5	52	32	54	813	600	200	15	..	.....	.....	.....	2	60	30	15	.....	.....	.....	5
C6 + PF6	63	53	65	1009	600	300	40	..	.....	.....	.....	2	90	30	15	30	.....	.....	6
C7 + PF7	73	51	70	1120	600	300	80	..	.....	.....	.....	2	90	30	15	60	.....	.....	7
C8 + PF8	83	60	88	1364	600	300	80	1	.....	.....	.....	2	90	30	30	60	.....	.....	8
C9 + PF9	96	63	94	1482	600	300	80	½	2	.....	.....	2	120	30	30	90	.....	.....	9
C10 + PF10	107	64	94	1530	600	300	80	1	2	.....	.....	2	120	30	30	90	.....	.....	10
C11 + PF11	141	76	99	1719	600	300	80	1	2	120	.....	2	120	30	30	120	.....	.....	11
C12 + PF12	155	80	99	1831	600	300	80	1	2	240	.....	2	120	30	30	120	.....	.....	12

Food	Weight in grams	Approximate equivalent
Orange	300	One and one-half large size
5 per cent vegetables	300	Three moderate portions
Skimmed milk	480	One pint 16 ounces
Fish	120	Two small portions
Potato	240	Two medium-sized potatoes
Meat	90	One moderate portion

Food	Weight in grams	Approximate equivalent
Bread	90	Three small slices
Oatmeal dry wgt.	30	One large spoonful
Cream	60	Four tablespoonfuls
Bacon	30	Four crisp strips
Butter	30	Three medium portions

use is described on the two cards in the illustrations. I know how some details in the arrangement of test and maintenance diets on these cards can be improved upon, but I don't wish to promulgate any changes until they have been still more thoroughly carried out in my own practice. I can say this freely, that if the cut and dried method proposed on these cards is followed, few disasters will occur, and what is still more important, many patients coming with apparently severe diabetes and in severe acidosis will be found to become sugar-free in a short period and acquire a tolerance of over 100 grams carbohydrate. The diabetic is seldom as severe as he appears, and the method described on these cards, if followed, frequently discloses the benignity of his disease, which might not be found out by other methods. My purpose is to unfetter the diabetic and enlarge his diet whenever that is possible. The methods described on these cards are so simple as to be self explanatory.

It is plain from the plan of treatment recommended on these cards that I believe in attempting to give a liberal quantity of carbohydrate, and as time goes on, my confidence in such a plan has grown, though its application is by no means universal. I still think that little George B. who is taking carbohydrate 165 grams, protein 70 grams, and fat 40 grams, at the end of nearly two years, is far safer than little Jack R. who is taking carbohydrate 36 grams, protein 42 grams, and fat 114 grams. Each is an only child. Each case is watched with equal care. Time alone will tell which method of treatment is the better.

In conclusion may I repeat the thought earlier expressed: The dietitian who thinks her duty done when food is served the diabetic is a failure. What you serve is of temporary value, but what you say lasts for life.

VOLUNTEER LINEN COMMITTEE SAVES HOSPITAL THOUSANDS*

By Jean Miller Todd, Vice Chairman Linen Committee, Presbyterian Hospital, Philadelphia, Pa.

It has been suggested that it would interest other institutions to know something of the methods of the linen room at Presbyterian Hospital, Philadelphia, as it is in some ways unique in hospital work.

It is entirely a volunteer service, run by volunteer workers, which carries on a wholesale business, and in the years of its existence has saved the hospital many thousands of dollars.

The sewing is all done by the various churches and Dorcas Societies in Philadelphia and the vicinity, free of expense to us, and where possible this work is delivered and called for by the hospital truck.

Owing to the immense quantity of materials handled during the year, the buying is all done from wholesale houses, based upon competitive bids.

The materials are then cut by the committee at their weekly meetings and turned over to the cut-out department of the committee to be sent to the churches when called for. A check book and tag system is used in this branch of the work, so that an accurate account can be kept of the work sent out and returned. The garments are cut with an electrical cutter and then assembled and over 3,000 garments were cut during the past year.

Once a month, upon requisition from the directress of nurses, a requisition which has been approved by a committee of the board of trustees is handed the linen committee and is filled from the stock of made articles that have been returned from the churches. In March and October a similar requisition is sent in by the housekeeper, and one from the superintendent of the Devon Home in January and June.

The articles called for are then laundered and stamped with the name of the department that has called for them and the date of issue. Seventeen thousand three hundred and forty-seven of these articles have been called for and placed in use during the past year; 10,594 flat pieces and 2,239 garments have been made for us this year by churches and Dorcas Societies, a large increase over last year. In comparison with last year, a trifle over 2,000 additional pieces were called for and our bills are more than $2,000 less.

In order to keep an accurate account of stock, a system of double entry bookkeeping has been used, which makes it possible to know at any time the quantity of any or all articles in stock; also how many articles of any given kind are used in any department during the year.

Two seamstresses are employed who do the counting of the articles for the laundry, the cutting of the larger garments, the stamping and marking, and the sewing of such things as are not made by the church—such things as curtains, laparotomy sheets, etc. For this purpose an electrical sewing machine is used and during the past year an electrical machine has been added to our equipment which embroiders the words "Presbyterian Hospital" upon the blankets, spreads, towels, pillowcases and covers of various kinds. This not only adds to the appearance but insures a longer life.

Everything in the way of household linens and clothing for the patients, the equipment of doctors, nurses and patients in the operating rooms and dispensaries; also the household linens of the Devon Homes, the Nurses' Home, the Maternity House and the houses of the superintendent, resident doctors, head nurses and housekeeper all are equipped and supplied from the linen room. This shows the wonderful vision and foresight of the women who commenced this work nearly fifty years ago, that while their work of a year is now handled by us each month, yet the work has been developed upon the framework which they evolved.

*From annual report of Presbyterian Hospital, Philadelphia, Pa.

SHORTENING THE HOSPITAL STAY*

During the past ten years the average stay of patients in the United Hospitals of New York has dropped from 20.7 days in 1911 to 15.4 days in 1921. This is equivalent to adding 25 per cent to the capacity of the hospitals, or a saving of one-quarter in the cost of each case treated. The drop which has been very steady, amounting to about half a day each year, is due to several causes:

1. Improved facilities for diagnosis and treatment.
2. More staff consultations, by which the nature of the case is early determined and time saved in applying the remedy.
3. Larger provision for convalescent care, making earlier discharge possible without danger to the patient.
4. Improvement of and closer cooperation with the dispensaries making it possible for them to continue the treatment of patients as ambulatory cases, who otherwise would continue to occupy a bed.
5. The development of the social service department, which often contributes information of great value to the doctor in understanding the trouble, and which helps the patient by removing fear and misunderstanding and by relieving anxiety as to family matters.

*Report of United Hospital Fund of New York, 1922.

Hospital Equipment and Operation

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

"A PLACE FOR EVERYTHING AND—"

THE physical management of a hospital is, after all, much like the conduct of a private household, except on a larger scale. The efficient hospital administrator, like the good housekeeper, believes in following the old adage, "A place for everything and everything in its place." This fact is exemplified particularly in the more modern hospitals in which architect, consultant, superintendent and building committee have cooperated in the planning of structural details so as to provide the greatest possible operating efficiency.

It is not so long ago that the hospital architect contented himself with the planning of merely the external shell, with the necessary dividing walls, without regard to the placing of essential equipment. Today this antiquated method has been largely abandoned. The progressive architect designs the hospital building with strict attention to its utilitarian needs and purposes; he provides in the design for the equipment which later is to be installed; he includes special cabinets recessed in the walls and fitted to the contour of the rooms; and at all times he aims to combine convenience in placing them architecturally with convenience in use.

Cabinets Are Now Standardized

This tendency originally required the construction of specially designed cabinets to meet the varying conditions that would arise in each building. With increasing use, cabinet construction approached standardization, certain dimensions and specifications being found suitable in a greater number of buildings. In addition the development of the sectional idea in cabinet construction permitted the use of standardized units to meet practically every space requirement.

This development came about not solely through the efforts of architects but from the experience of superintendents who realized the importance of ample, scientifically planned storage in every department of the institution. Proper storage cabinets, cupboards and shelves serve to keep the various articles in clean, sanitary and usable condition, and make them easy of access since they provide a place for every article used in its necessary quantities.

With the increase in the relative number of private rooms, new problems in supply storage have arisen. It was comparatively easy to plan and arrange a central storage cabinet for the various supplies and utensils used in an open ward, and this central cabinet or storage space was equally accessible to all the nurses in the ward.

Storage Space in Private Rooms

But with private rooms exceeding the number of ward beds, such centralized storage is no longer economical or practical. Provision must be made so that the nurse in attendance in the private room may have ready access to those staple supplies and utensils in daily use without the necessity of wasting time and steps in leaving the room.

A practical solution to this question was accomplished in Mount Sinai Hospital, New York. Steel cabinets, including storage space for supplies as well as a wardrobe for patients' clothes, were built in each room, providing a convenience and economy not possible in any other arrangement. These cabinets are placed either in the corridor wall or in the interior walls separating adjoining rooms.

Illustration No. 1 shows a portion of a private room and indicates the treatment given the combination cabinet when installed in the interior wall. It is to be noted that the

Fig. 1.

Fig. 2.

Fig. 3.

flange edge of the cabinet is flush to the wall, making a sanitary and sightly arrangement.

When, however, this cabinet fixture is installed in the corridor wall, the architect must give sufficient depth to the wall to permit of its inclusion.

Illustration No. 2 shows how this is accomplished, the recess space being occupied by the lavatory. This illustration indicates more clearly the advantage of this construction with the flange edge of the cabinet flush with tile and plaster work.

Combination Wardrobe and Storage Cabinet

The many convenient features of this combination wardrobe and storage cabinet are shown in Illustration No. 3. The left compartment with the long door is designed for wardrobe use with shelves and hooks, ample ventilation being provided through door openings. The upper cabinet at the right is for linen and medical supplies. The central compartment is a refrigerator with cork insulating walls, providing a convenient and oftentimes necessary cold storage for foods, beverages, etc. The lower compartment is for utensils, this compartment being provided with ventilating openings in the door and with a connection at the back to a ventilating airduct. The exterior of the cabinet as well as the interior of the wardrobe section is finished in mahogany enamel, harmonizing with the trim and furniture of the room, while the interior of the supply spaces is in white enamel.

In some institutions storage cabinets built in the corridor walls have been provided with an additional opening on the corridor side. This plan permits of the replenishing of supplies from the corridor without disturbing the patient. An objection to this arrangement, however, arises from the fact that a metal cabinet acts as a sound conductor, transmitting many of the corridor noises to the interior of the room.

Fig. 4.

Storage Space in the Kitchen

Probably no department in the hospital offers greater opportunity for the installation of economical storage space than does the kitchen and allied departments. The photograph of one of the Mount Sinai kitchens, Illustration No. 4, offers a number of practical suggestions for built-in equipment. At the left is a kitchen cabinet, a close-up of which is shown in Illustration No. 5. This is a double unit, consisting of the cabinet base and the upper cover. The cabinet section base is mounted on a tile base and provided with cupboard and drawer space. The upper section is fastened permanently to the wall and is partially recessed as shown in Illustration No. 4. This and other built-in equipment in the room are finished in olive green. This color lends itself very well to use in food service departments.

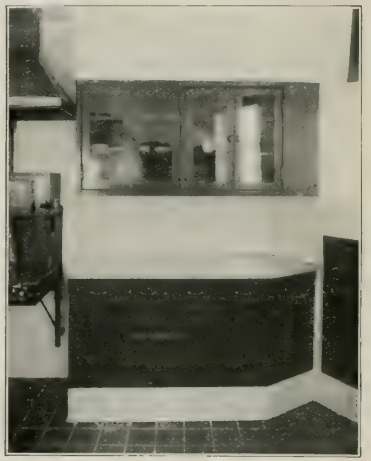

Fig. 5.

Directly at the right of the kitchen cabinet is a large receptacle for garbage disposal, another being shown at the extreme right of the photograph. These garbage containers are provided with double ventilating doors, equipped with self closing device and are recessed in the exterior wall.

Like the garbage containers, the two small cabinets di-

rectly over the radiator are likewise built in the wall, these being intended for the storage of dish cloths and similar kitchen supplies. Both garbage cans and dish cloth cabinets are set flush with the wall tile, making a sanitary arrangement that is economical of floor space. It is needless to say that the illustration shows not a main kitchen, but a floor kitchen or serving room.

Built-in Medicine Cabinets

In the majority of hospitals, the ward or floor medicine cabinet for nurses' use is frequently the ordinary type of cabinet in which the upper cupboard section is attached to a table or cupboard base. In Mount Sinai Hospital a very convenient cabinet for this purpose has been designed. The upper part consists of a separate cupboard section which is permanently attached to the wall. The one shown in the illustration is made with a

Fig. 6.

sloping top, permitting easy cleaning. While this construction is preferred to the exposed flat top, it is generally conceded that a better arrangement is secured when the installation is made like the kitchen cabinet shown in Illustration No. 5, in which the cabinet is partially recessed with the plaster wall, coming down flush with the top flange of the cabinet.

The base of the medicine cabinet as shown in Illustration No. 6, is designed with convenient cupboard sections, small sink with water supply and with marble top and splash board. Where desired Monel metal can be readily substituted for the top and splash board. It will be noted from this illustration that these units are set in the corner with the right hand edge of the cabinets flush with the plaster wall, but with the left end open and exposed.

Built-in instrument cabinets are not particularly new. They have been used in hospitals in various parts of the country for a number of years. One of the first hospitals to install the built-in instrument cabinet was the Groves Latter-Day Saints Hospital, Salt Lake City. Illustration No. 7 shows one of the large built-in instrument cabinets installed in Mount Sinai Hospital. It will be noted that this entire cabinet is set flush with the walls. The upper section is provided with glass doors and adjustable glass shelves for instrument storage, while the base is equipped with cupboards fitted with steel doors. Sliding work

Fig. 7.

shelves are provided in two of the cabinets.

The location of built-in instrument cabinets will of course vary in different hospitals. In some instances these will be located in the operating room, in others in an adjoining room. Where two operating suites are adjoining, built-in instrument cabinets are frequently designed with openings in two adjoining rooms. This permits of a single central storage of surgical instruments and they are directly accessible for use in either of the operating suites. There is undoubted convenience in such an arrangment, although possibly certain objections might be raised.

Hospitals are rapidly appreciating the advantages of steel cabinet construction in the various departments devoted to the preparation and storage of food. Carefully planned steel cabinets not only permit of proper care of dishes and other utensils, but from their very nature are sanitary and easily cleaned, while the glass and steel doors keep the contents of the cabinets in desired condition. Illustration No. 8 shows the cabinet installation in the dish washing room of the private patients' pavilion of Mount Sinai Hospital. These are not recessed cabinets, but are permanently attached and form part of the original building construction. The upper section, as can be readily seen, is made with a sloping top, this prevents the accumulation of dust and prohibits careless employes from using the top of the cabinet for surplus storage. The sliding glass doors permit ready access. The base of the

Fig. 8.

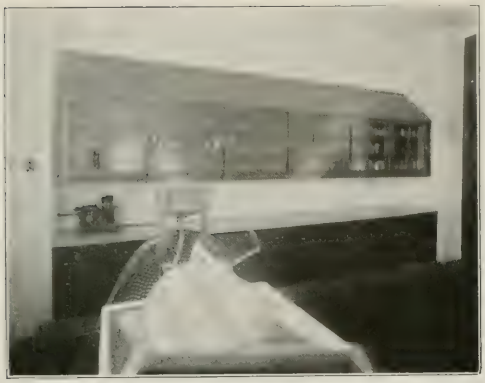

Fig. 9.

Fig. 11.

cabinet is set flush with tile base and is equipped with both drawer and cupboard space. While the illustration shows a marble top, Monel metal and other substances are frequently used for this purpose.

A similar installation is found in the silver and glass room. In this construction the architect has provided for the recessing of the cabinet on both ends, but not at the top, the sliding steel top being provided. The general design of this cabinet, shown in Illustration No. 9, is the same as Illustration No. 8. Both of these cabinets are finished in green enamel.

Special diet kitchens and diet classrooms have need of specially designed steel cabinets. Illustration No. 10 shows the type of cabinet employed in the diet classroom of the children's pavilion of Mount Sinai Hospital. These cabinets are partially recessed, the wall, however, is not made flush with the top of the cabinet, but the sloping steel top is utilized. These built-in cabinets with their base flush with the tile, wainscoting and wall secure a degree of sanitation that cannot be obtained from the ordinary portable cabinet. A similar, but smaller, cabinet (Illustration No. 11) is in use in the milk room of the children's pavilion. Both top and bottom sections are again built-in, but only partially recessed.

The various illlstrations readily indicate the practicability of built-in construction. It is apparent that this does not necessarily mean specially made cabinets, but through the use of standardized units, the requirements of practically every hospital may be met.

Only a few of the places where steel cabinets should be provided in a hospital have been shown or described in this article. In a later article other forms of storage cabinets and shelving will be illustrated and described, including the linen room, the supply and food storerooms, locker rooms, safe deposit vaults and utility cabinets.

Fig. 10.

HOSPITAL FIRES

It is startling to learn that, during 1919 and 1920, 870 fires occurred in institutions classified as hospitals, asylums and sanatoriums—an average of more than one fire a day in that type of institution. If any structures should be properly protected, those in which human beings lie incapable of self-protection should be given first consideration. Among the causes of fire in these institutions were, first, sparks on the roof; second, defective chimneys and flues; third, lightning; fourth, heating installation; and fifth, electricity. These etiologic considerations point the way to prevention, but there are further special considerations which apply to hospitals. The height of hospital buildings is a matter for concern; ambulatory patients should be placed on the higher floors, the lower floors being reserved for those completely bedridden. In every hospital, there should be located fire alarm boxes for prompt notification in case of fire. Volatile liquids which are easily inflammable should be handled with caution. Chemical extinguishers should be easily available, and a fire drill for the employes should be a regular experience. "When it is realized," says the National Board of Fire Underwriters, "that most fires are preventable, and that there are none too many hospitals, it seems a pity that large sums must go annually toward replacing what might have been conserved for further usefulness."—*Journal of the A. M. A.*

POOR NEGRO LEAVES $100 TO FIGHT TUBERCULOSIS

Gratitude for care he received during his last illness prompted Jesse Trunty, a colored laborer, to leave $100 of his $1,400 estate to the Columbus Tuberculosis Society in Ohio. The bequest has been turned over to the society by the executor of his estate and will be applied to the funds for maintenance of the society's nursing service. The man died in Franklin County Sanatorium in 1920.

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OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by HERBERT J. HALL, M.D., Devereux Mansion, Marblehead, Mass., and MRS. CARL HENRY DAVIS, Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.
Co-Editors: LORING T. SWAIM, M.D., 372 Marlboro St., Boston Mass., and MISS MARY E. P. LOWNEY, Room 272, State House, Boston, Mass.

REVIEW OF STATE ACTIVITIES DURING 1922

THE monthly Roll Call for January takes the form of a review of the activities of the state societies during the past year. A number of the societies can point to real achievement during that period.

Illinois

In presenting a report of meetings held during 1922, the Illinois Society feels justifiable pride in the character of its programs, all of which have been most inspiring and helpful. Owing to the kindness of the Hospital Library and Service Bureau, most of the meetings have been held at that office, 22 East Ontario St., Chicago.

The March meeting held at Michael Reese Hospital had for it speaker, Dr. Goodkind, who emphasized the value of occupational therapy in cardiac cases. The speaker at the May meeting was Miss Neva Boyd, whose subject was "The Therapeutic Value of Games." Miss Boyd handled her subject in a most entertaining and instructive way.

Mrs. Alfred Benson, president of the Vocational Society for Shut-Ins, spoke at another meeting and gave a most comprehensive and interesting account of the work of that organization.

Perhaps the most important session of the year, was held on April 29, when the Illinois Society had for its guest and principal speaker, Mrs. Eleanor Clark Slagle, the honorary and founder president. Her subject, "The Present Demand and Future Needs," was handled in her usually efficient and captivating way. Dr. Harry E. Mock, speaking on "Occupational Therapy as a Part in Complete Rehabilitation," illustrated with lantern slides, gave another address profitable to its auditors. Dr. Frank Borglum of the Public Health Service spoke of the value of occupational therapy in tuberculosis cases. This meeting also took the form of a mid-west conference, and greetings from other state societies were heard.

At the November meeting, the society was honored by the presence of the newly elected national president, Mr. T. B. Kidner, who gave a pleasing retrospect, and a hopeful outlook for the work of the coming year. After the meeting, the board entertained Mr. Kidner at dinner during which another most helpful conference was held and many plans formed for the work of the year to come.

An exhibit of the Manitoba Society of Occupational Therapy

Manitoba

The year, 1922, has been for the Society of Occupational Therapy of Manitoba perhaps the most important since its inauguration.

In February, the ambition of the Society was realized when the workshop was opened, and although the general depression in the industrial world was, of course, a big factor to be contended with, much good work has been done, and the Society in consequence has become more firmly established.

The shop is at present temporarily closed, owing to the projected inclusion in the Federated Budget Charities, which inclusion will of necessity alter considerably the plans which had been made for the coming season.

Occupational therapy is firmly established in the hospital in the province, the mental institutions in particular being most active and successful. One feels that slowly but surely the great beneficial influence of the work is being more widely recognized.

Maryland

At the first meeting of the Baltimore City Medical Society held in October, 1922, the subject of occupational therapy was discussed. An address was made by Dr. William Rush Dunton and informal talks were made by three occupational therapists who as specialists in this line are doing work in the homes of patients or in their own studies. Much work of this kind has been done under special physicians with private patients in Baltimore. The members of the Maryland Occupational Society were cordially invited to attend the meeting. It was most gratifying to the Occupational Therapy Society to feel that the Medical Society was interested enough in occupational therapy to give part of its program over to the regular subject.

The regular meetings of the Maryland Society were held

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each month. During the past year the Society has been much interested in both craft and medical subjects.

A special outline of work for the coming year is to be decided upon, as up to this time the society has been mainly interested in publicity methods, feeling that occupational therapy and the knowledge of occupational therapy is growing fast in Baltimore. At present there are fourteen hospitals using occupational therapy successfully.

Massachusetts

No report.

Michigan

No report.

Minnesota

The Minnesota Occupational Therapy Association was organized on June 3, 1922, at Glen Lake Sanatorium, Oak Terrace, Minn., with a charter membership of fourteen. A constitution was drafted and membership in the association left open to all interested in occupational therapy. Annual dues are $2. It was decided to hold quarterly business meetings in conjunction with the state board of control and monthly luncheon meetings at some place in the Twin Cities for the exchange of ideas and cooperation between the workers.

Made by patients in Manitoba hospitals

The following officers were elected: President, Dr. E. S. Mariette, Oak Terrace; first vice president, Jessie Sauer, St. Paul; second vice president, Julia Bradley, Fergus Falls; and secretary-treasurer, Gracia Loehl, Oak Terrace.

The executive committee consists of the above mentioned officers, Miss Gertrude Ross, University of Minnesota; Miss Dorothy Rouse, U. S. Veterans Hospital, Minneapolis; and Mrs. McMullen, St. Paul City and County Hospital. Miss Jessie Sauer, first vice president, was appointed a delegate to the A. O. T. A. convention at Atlantic City.

The board of control of state institutions and the advisory commission of the state sanatoriums for consumptives are both showing great interest in and cooperation with this association for the advancement of the occupational work in the institutions controlled by the state. Minnesota claims the distinction of being the first state to introduce a state system of occupational therapy in its tuberculosis sanatoriums.

Miss Jessie Sauer is in Washington, D. C., for the winter.

Miss E. M. Beach is at Fort Lynn, Colo., Veterans' Bureau Hospital, No. 60.

Missouri

No report.

New York

In January a survey was made for the East Harlem Health Center. The report showed sixty-one home-bound cases which consisted of infantile paralysis, cardiac, mental, tuberculosis and rheumatism. This report showed the great need for curative home-bound work in the East Harlem Health Center district.

In March 200 letters were sent out, giving a brief summary of work from March 1, 1922. That month the Society of Pennsylvania Women gave a tea in the Work Shop, 203 E. 21st Street. About fifty women attended and a good many articles which the patients had made were sold.

The Fred Stone circus was given at Mineola on July 4, under the direction of Mrs. C. J. Sullivan, and was a great success.

The following statistics show something of the scope and work of the Society:

Institutions and hospitals requesting aides	26
Occupation therapy aides placed	24
New memberships	10
Total memberships	237

The Work Shop was started at 203 E. 21st Street on March 2. From March 3 to October 15 it had thirty-three patients. During that time there were

9 sent back to hospitals for operations or treatments
8 placed in positions outside
2 doing home work
3 placed in production at Dover Farms
2 dropped because they would not work

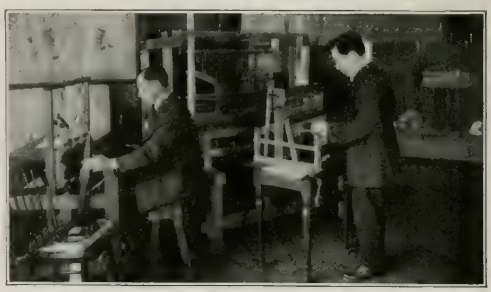
Fees were received from Hogan & Son for an industrial accident case for curative treatment; also from Montefiore Hospital fees for three patients for curative work were received.

The society is sending one teacher to private cases three mornings a week, and is working with ten hospitals and social settlements, trying to install occupational therapy. Work was started in a small way in Post Graduate Hospital this summer, and Rockfeller Hospital expects to start work this month.

State Hospitals.

The New York State Hospitals have made great progress in occupational therapy during the year. The state hospital commissioners and the physicians in the several institutions have become actively interested in the work. A state appropriation for the employment of experts was secured at the last session of the legislature and became available July 1, 1922. As general director of the work in several state hospitals, the commission appointed Mrs. Eleanor Clarke Slagle, secretary-treasurer of the American Occupational Therapy Association. During the summer months Mrs. Slagle made a survey of conditions throughout the state with respect to occupational therapy and formulated plans for the better organization of the work in the state hospitals. More recently, on Mrs. Slagle's recommendation, the state hospital commission appointed chief occupational therapists in several state hospitals as follows:

Miss Eloise Palmer Finley at Gowanda State Hospital. Miss Finley has had successful experience in charge of the occupational therapy department at the Sheppard and Enoch Pratt Hospital at Towson, Md.



In the workshop of the Manitoba Society, now temporarily closed

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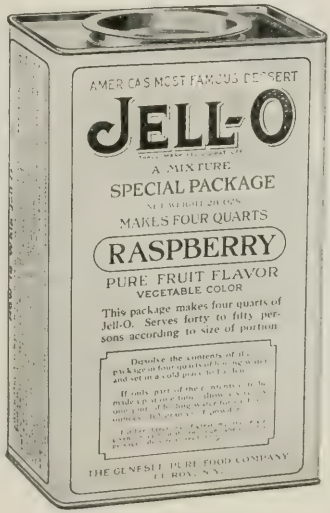

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Miss Helen Ryce at Hudson River State Hospital. Miss Ryce has been employed in the occupation department of the Hudson River State Hospital since November 1, 1920. She had previously served at Bloomingdale Hospital, White Plains, N. Y.

Miss Belinda Wright at Manhattan State Hospital. Miss Wright has had charge of occupational therapy at this hospital for several years.

Miss Laura Miller at Brooklyn State Hospital. Miss Miller is a graduate of the art and manual training course of Mechanics Institute of Rochester, and has had special training in occupational therapy at Chicago State Hospital. She has also had several years of successful experience as a teacher of art.

Miss Sarah L. Kelley at Central Islip State Hospital. Miss Kelley was trained in the Boston Sloyd Training School and Teacher's College, New York City, and for some time past has been employed as a teacher of occupational therapy in the United States Public Health Service.

Ontario

During the past year occupational therapy has been carried on as usual in the hospitals throughout Ontario. The quality of the work done by the patients has been steadily improving, which has encouraged both the patients and the aides to further effort.

The occupational therapy department of the Toronto General Hospital held a Hallowe'en bazaar in October, at which a wide variety of crafts was represented. Painted flower pots, decorated fancy flowers, lamp shades, knitted goods, all manner of dressed dolls, toys from Marble Head, Mass., assembled and painted, toys manufactured in the hospital, leather work in abundance, woodcarving, applique, and embroidery—these made a most creditable display, and it is interesting to note that there was not one basket offered for sale.

The society itself has centered its activities for the past year on establishing a community workshop. This has been accomplished, and on November 1 the workrooms of the Ontario Society of Occupational Therapy, at 21 St. Mary Street, Toronto, were officially opened. Collections for the past year, raised by fees, entertainments, donations, and a course of lectures, were sufficient to supply the shop with the equipment necessary to carry on. During the first week there were entered on the books two classes in craft work, three bursary patients, and four private patients. This work has started very enthusiastically, and the aides have great hopes for its future.

Pennsylvania

Occupational therapy has made definite progress in the state of Pennsylvania since the beginning of 1922. The following will give some idea of the growth of the work during the past year:

In the tuberculosis sanatoriums under the state department of health at Cresson, Mont Alto and Hamburg, the departments devoted to occupational therapy have been considerably strengthened and several new occupations are being developed. The clinic at Reading is giving occupational therapy twice a week, and it is hoped that this venture will prove so successful that it will demonstrate the necessity of its introduction into every tuberculosis clinic in the state.

A department was opened early in the year at the Eagleville Sanatorium and also at the Hospital in Philadelphia under the direction of two part-time workers. The work in both institutions is now under the direction of one full-time worker who is proving the value of occupational therapy in the tuberculosis field.

Occupational therapy has also been given very successfully during the past summer at the Country Branch of Malvern of the Rush Hospital for Consumption and Allied Diseases.

Miss Mary L. Putnam was appointed field representative of occupational therapy, state department of public welfare, and has begun a state-wide survey of the present facilities for occupational therapy in all state institutions. A number of the state institutions for the insane have recently introduced occupational therapy, and many are planning either to start the work or to extend departments already established.

The new Curative Workshop erected for the occupational therapy department of the Marion National Sanatorium, National Home for Disabled Volunteer Soldiers.

The Philadelphia Hospital for Mental Diseases, Byberry, has extended its occupational therapy department, and the department of health has established occupational therapy in the Convalescent Heart Clinic in the Philadelphia Hospital for Contagious Diseases.

The occupational therapy rooms have been very much enlarged in the department for men, Pennsylvania Hospital for Mental and Nervous Diseases, and a large room for weaving has been opened in the women's department which will double the space previously used for occupations. The Pennsylvania Hospital, Department for the Sick and Injured, enlarged its occupational operations last summer by opening a workshop which is used by patients referred from the neuro-psychiatric clinic and the cardiac clinic. It is also open to patients from other clinics.

Occupational therapy was introduced into the Jefferson Hospital last winter and into the Children's Hospital in the late summer. The American Red Cross opened a department at the U. S. Navy Hospital, League Island in June, which is called "diversional therapy" but which is under the charge of two graduates of the Philadelphia School and is being conducted along strictly therapeutic lines.

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THE CONTAGIOUS DISEASE HOSPITAL AT CHICAGO - A CRANE EQUIPPED INSTITUTION

ECONOMY IN HOSPITAL SANITATION

When a hospital is planned, foresight suggests that sanitation facilities be provided for future as well as immediate needs. Water and drainage systems concealed in walls and beneath floors are accessible only at considerable expense and inconvenience. Economy, therefore, demands the installation of dependable pipe-lines to insure against the necessity for expensive repair work. Piping systems built with Crane equipment outlast fine modern buildings. In quality and endurance, Crane valves and fittings match the convenience afforded by Crane hospital plumbing fixtures.

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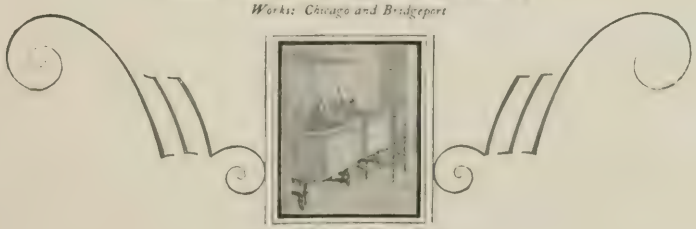

"Barnert" Surgeons' Washup Sinks

An Association of Aides was organized in the early spring with Miss Ida F. Sands as president. All the aides in Philadelphia, who are in active service, are eligible for membership, active or associate, according to the time that they have been serving. A large number of the members are necessarily graduates of the Philadelphia School where the meetings are usually held.

There was a meeting of the alumnae association of the Philadelphia School early in June which was well attended. At this time a constitution and by-laws were adopted and the members present were most enthusiastic in their plans for the future and for the advancement of occupational therapy throughout the state. The following officers were elected: Miss Hazel F. Thatcher, president; Miss Helen Murphy, vice-president; Miss Dora Ware Howson, secretary; Miss Charlotte Brumbaugh, treasurer.

Washington, D. C.*

The district society has progressed well during the past year. Miss Elsie Taft, the president of the society has moved to New York. The treasury shows a balance on hand of $92.89.

Wisconsin

A year ago the Wisconsin Association of Occupational Therapy was encouraged to have twenty-nine members attend the annual dinner. The association has grown to such an extent that within the past six weeks the association has given two dinners at each of which over seventy were present.

The association has made progress during the year. Several county sanatoriums and Mount Sinai Hospital, Milwaukee, have added departments of occupational therapy. The staffs have been increased in other occupational therapy departments. Work among the "shut ins" in Milwaukee has also been started.

Two issues of the Wisconsin *Journal* were published during the year. Ten members have been lost but thirty-four gained.

Members of the Association had the opportunity of hearing lectures twice a month during the year at "X-Ray Pictures and Their Relation to the Occupational Therapy of the Curative Workshop." This year members will visit and study philanthropic social organizations every other week so that they may understand and cooperate with related organizations. A dinner will follow for members of the association.

A two-day conference was held in Milwaukee on January 20 and 21. Visits to hospitals, programs, lunches and dinners were given for out of town guests.

Eleanor Clarke, secretary-treasurer of the American Association, was entertained on May 3 and 4.

Six delegates attended the national convention at Atlantic City in September.

On November 4 a party was given at the Curative Workshop to raise funds for the treasury. The annual business meeting with election of officers was held on November 23.

Members of the Wisconsin Association attended a meeting of the Illinois Association on Nov. 11. Nov. 14 to 17 the Wisconsin Association staged an exhibit for the Tri-State Medical Association which met in Milwaukee.

National Military Home Service

The records of occupational therapy in the National Military Home Service show a material growth in the work for the year of 1922.

The most important features of the development are:

(1) *Accommodation provided for occupational activities in the hospitals.*

Working conditions have been greatly improved by the providing in all homes where there are departments of occupational therapy, adequate space for the work, both for ward work and the curative workshops.

At the Marion National Sanatorium, Marion, Ind., a two-story, 215-foot cement shop building, well lighted and ventilated, has been completed for the department, providing ample space for classrooms and shops, and affording an opportunity for a broader development in the future.

In each of the tuberculosis units in process of completion; located, respectively, at the Marion National Sanatorium, The Central Branch, Dayton, Ohio, and the Northwestern Branch, Milwaukee, Wis., the ground floor of one wing has been set aside for occupational therapy shops and classrooms. These shops are splendidly lighted and ventilated, and are to be equipped with motor-driven machinery and other equipment approved for occupational therapy in hospitals for tuberculous patients.

At the Pacific Branch, Sawtelle, Cal., a group of seven small buildings have been provided for the shops of the department.

At the National Sanatorium, Johnson City, Tenn., spacious quarters have been provided, including the ground floor of two wings.

At the Battle Mountain Sanatorium, Hot Springs, S. D., the ground floor of one wing has been set aside for classrooms and shops.

(2) *Standardizing the work.*

It is the desire of the National Military Home Service that occupational therapy be considered in its broadest aspect, and that it include all occupations medically prescribed, whether diversional, recreational or pre-industrial. Therefore a definite standard has been established, and the work is being developed in all homes in accordance with this standard.

A program of three definite progressive steps in the patient's rehabilitation has been approved for the service. It consists of:

(a) Individual occupational therapy (including bedside work).
(b) Group ward work, in ward shops or day rooms.
(c) The curative workshop, where the work is both curative and pre-vocational, but emphasizing wherever practicable the latter type of work.

The homes having departments of occupational therapy are: The Marion National Sanatorium, a neuro-psychiatric sanatorium of 1,080 beds for the care of the World War men which has at the present time a staff of eleven aides in the occupational therapy department.

The National Sanatorium, Johnson City, Tenn, a 1,100 bed sanatorium for the care of the tuberculous World War men which has 12 occupational therapy aides.

The Central Branch, Dayton, Ohio, having a 1,000 bed hospital with both general and tuberculosis service, which has seven occupational therapy aides.

The Pacific Branch, Sawtelle, Cal., which has a 800 bed hospital with both general and tuberculosis services, and eight occupational therapy aides.

The Northwestern Branch, Milwaukee, Wis., having a 1,000 bed hospital, with both general and tuberculosis services, which has at the present time only an academic aide, but when the 500 bed tuberculosis unit is opened, about February 1, plans are being made for a comprehensive program for occupational therapy.

The Battle Mountain Sanatorium, Hot Springs, S. D., a 400 bed sanatorium, which has two occupational therapy aides.

*The Washington society has sent two interesting reports of the year's work at St. Elizabeth's Hospital and the Tuberculosis Hospital of the District of Columbia, which will be published in the February number.—THE EDITOR.

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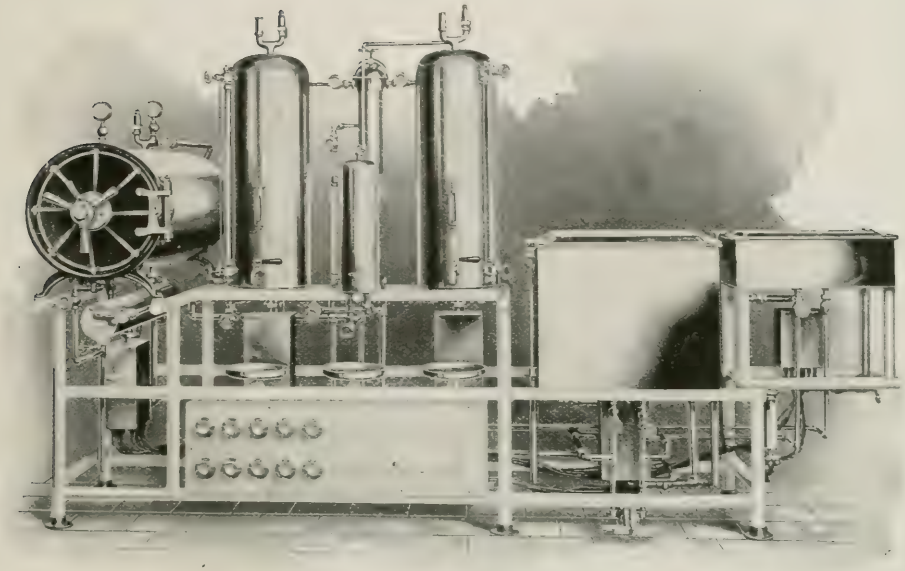

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MEETINGS, CONVENTIONS AND CONFERENCES

MICHIGAN HOSPITAL ASSOCIATION HOLDS SEMI-ANNUAL MEETING AT DETROIT

THE sixth meeting of the Michigan Hospital Association was held at Harper Hospital, Detroit, December 6-7.

Seventy-five persons, representing every phase of hospital activity, were present, the meeting being one of the most successful from a practical standpoint ever held.

At the opening session Wednesday forenoon, the first paper, "Should the Patient Exist for the Hospital or the Hospital Exist for the Patient?" was presented by Miss Grace McElderry, superintendent of the Hackley Hospital, Muskegon. Her opening sentence was that the question could be easily answered by the statement that the hospital should exist for the patient; but in an interesting manner, it was brought out that very often, unless care is exercised by the administrative members, the staff is apt to forget the relation which that particular patient bears to the hospital as a whole rather than to him as an individual.

Small Hospital and the Intern

The second topic, "The Hospital Intern" was presented by Dr. C. W. Munger, superintendent of the Blodgett Memorial Hospital, Grand Rapids. The major premise of this paper was that the intern's chief need is educational experience and if the hospital is not able to give him an educational training which is worth while, the hospital cannot make up for that deficiency by any financial remuneration it may offer. Ordinarily, the hospital of less than fifty beds does not furnish a sufficient variety to give the intern the type of training he really needs. However, it was shown that the small hospital can do more for the intern by a careful study of the needs than had been done in the past.

The first paper in the afternoon session of Wednesday was given by Dr. T. K. Gruber, superintendent of the Receiving Hospital, Detroit, on "The Emergency Problem in the Hospital." The Detroit system was outlined, under which the emergency cases are first sent to the receiving hospital and are then transferred to any other hospital in the city to which they may desire to be sent, if they are not in a condition to be returned home within a short period of time. Following a detailed statement of their local situation, suggestions were made with regard to handling emergency cases in hospitals where the emergency work is only one department.

Dr. Charles E. Stewart, associate medical director of Battle Creek Sanitarium, discussed "The Hospital as an Educational Center," tracing the history of hospitals from the beginning and showing that to an increasing degree the tendency was to emphasize the educational value of the hospital in any community.

Detroit Scheme of Central Nurses' Training

Miss Helen Livingstone of the Cass Technical High School, Detroit, spoke on "The Relation of the Hospital School and Other Educational Institutions." In Detroit an arrangement has been consummated with the board of education under which the pupil nurses from the various hospitals of the city receive their training in such subjects as chemistry, dietetics, elementary materia medica, etc., at a technical high school. The method used there could be entered into in most communities where the number of pupil nurses in the hospitals are sufficiently large to provide regular sized school classes, the speaker declared.

Dr. C. G. Parnall, director of the University Hospital, Ann Arbor, discussed the topic of "Nursing Education," giving a review of the report recently submitted by the committee working under the auspices of the Rockefeller Foundation. Two points were brought out prominently, the first that by a rearrangement of work in the hospitals as the result of which more ward helpers and graduate nurses would be employed, it was possible to provide the educational requirements of the present training school courses in a period of two years and four months instead of taking three years as was now being done in a large number of schools. The second point was that in the hospital field there is a demand for more thoroughly trained nurses than our present educational system provides, and that we must look forward to the time when a few schools will afford full four-year training courses in order that leaders in the nursing field may be trained.

Civilian Rehabilitation Pays

At the Wednesday afternoon session Mr. Percy Angove, state supervisor of vocational rehabilitation, spoke on the subject of "Civilian Rehabilitation," outlining the work which had been done in Michigan by the state board. Of the forty cases which have been re-established in industrial life as the result of their work the earnings at the end of the first year of their re-establishment has been five times the cost involved.

Dr. D. M. Morrill, chief resident physician of the

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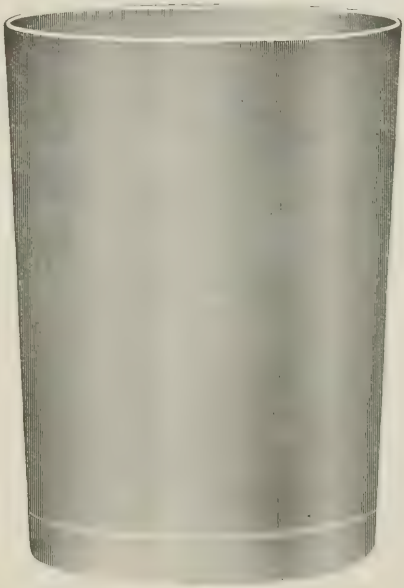

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University Hospital, Ann Arbor, discussed "Fifth Year Internships as Required by the Michigan State Board of Registration." Dr. Morrill outlined the requirements that have been sent out by the Michigan board and gave a schedule of a method by which these requirements could be met. The board has stated that this year is an experimental one, and at its end the various hospitals will be called upon to present outlines of the methods which they have followed during the year, from which will probably be suggested a definite plan for internships to be tried another year.

At the Thursday morning session, Miss Alice Walker, director of social service work, Harper Hospital, presented a well worked out paper on "Social Service Problems in the Hospital," and Dr. W. A. Evans of the department of roentgenology, Harper Hospital, discussed the topic "Deep X-ray Therapy in Relation to the Hospital."

Dr. Babcock Conducts Round Table

Following this, the usual round table discussion was conducted by Dr. W. L. Babcock, superintendent of Grace Hospital, Detroit. The questions presented were the following:

What do you think of the proposition of trained nurses to do intern work? How are the per capita costs running this year? What is the best method of tagging new born babies? Should x-ray patients who enter the hospital for examination only be registered? What is the relative value of internships in large or small hospitals? What are the accepted standards of vacations for supervising nurses? What allowances are made for sick leaves? Should hospitals handle compensation cases at less than cost and what items should not enter into cost? Is not the trend of present day registration such as training schools represent impossible except in large hospitals? Should a hospital furnish nurses from its regular personnel for special cases? Should a sinking fund be established to replace buildings?

Although each of the papers on the regular program had been discussed, the questions presented were in all cases the subject of interesting and profitable presentations.

At the business meeting it was decided to present a bill to the legislature, which will meet this month, for the protection of owners and operators of hospitals and sanitariums operated under the laws. The constitution of the association was changed to provide for the election of officers at the December meeting rather than at the June meeting.

Father Bourke Is New President

The following officers were elected for the ensuing year: President, Father Michael P. Bourke, St. Joseph Sanitarium and director, Catholic Hospitals in the Detroit Diocese, Ann Arbor; vice presidents: Dr. C. W. Munger, superintendent, Blodgett Hospital, Grand Rapids; Mrs. W. E. De Witt, trustee, General Hospital, Saginaw; Miss Mae M. Fye, superintendent, Mercy Hospital, Benton Harbor; secretary, Dr. Donald M. Morrill, chief resident physician, University Hospital, Ann Arbor; treasurer, Miss Anna M. Schill, superintendent, Hurley Hospital, Flint.

Trustees for three years: Dr. W. L. Babcock, superintendent, Grace Hospital, Detroit; Dr. C. G. Parnall, director, University Hospital, Ann Arbor; and for one year to fill a vacancy, Dr. Charles Stewart, associate medical director, Battle Creek Sanitarium.

The members present were guests of the Ford Hospital at a luncheon held Thursday noon, and spent the afternoon of that day in visiting the various hospitals of Detroit.

THREE CANADIAN ASSOCIATIONS MEET JOINTLY

THREE Canadian hospital associations gathered in joint session at Winnipeg, Manitoba, Nov. 13-16—the Manitoba Hospital Association, the Catholic Hospital Association of Manitoba and the Western Canada Hospital Association. Meetings were held at the Medical College and attracted a large representation of Manitoba hospital workers, both of the state and Catholic associations. Few of the Western Canadian membership were able to attend.

Several papers of more than usual helpfulness were read and round table discussion on a variety of hospital topics was both prolonged and absorbing. Motion was made at the joint convention to discontinue the Western Canadian Association, since it has accomplished the purposes for which it was organized—the promotion of hospital organizations and of standardization in the four western provinces.

Move to Discontinue W. C. H. A. Fails

The body was not ready to take that step, however, and the president was given authority to appoint a committee to consider the subject and report back at the next annual session. By motion President George F. Stephens of the Winnipeg General Hospital will continue as executive of the organization for another year.

The following officers were named by the Manitoba Hospital Association: honorary president, Premier Bracken of Manitoba; president, Dr. C. A. Barrager, Hospital for Mental Diseases, Brandon; vice president, Dr. James McKenty; secretary, Miss S. Persis Johnston, Brandon General Hospital, Brandon; and treasurer, Dr. T. Glenn Hamilton.

Resolutions were passed by the convention (1) endorsing the principle of the supervision by the University of Manitoba of the standards for the teaching and training of nurses in that province; (2) authorizing the appointment of a committee to report at the next annual conference on the advisability of affiliating with the American Hospital Association as a geographical section; (3) recommending for the consideration of the next executive the principle of having a central advisory board and intelligence bureau for hospitals in the province; (4) revising the constitution to include in its active membership members of hospital boards or directors; and the usual resolutions of courtesy.

Sir James Aikens Holds Reception

Luncheon was served the delegates on the second day of the convention at the Winnipeg General Hospital and an inspection trip through the building was conducted. On the closing day at noon a buffet luncheon was served at the Municipal Hospitals and delegates enjoyed making a tour of that institution. The chief social event of the convention was the reception on Tuesday from 4:30 to 6 o'clock at the Government House given by the lieutenant-governor, Sir James Aikens, and Lady Aikens.

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The Hon. F. M. Black, provincial treasurer, delivered the address of welcome at the opening session on Monday evening, Nov. 13.

Dr. David A. Stewart's presidential address perhaps was the outstanding paper of the convention. He said in part:

"On first consideration it would seem that the hospitals of Manitoba, metropolitan and rural, have few similarities, but they are alike in that all are engaged in the care of the sick and share in the problems of that care; all are alike in the desire that that care must be the very best; and all have the common task of teaching."

Tuesday morning's session was given over entirely to round table discussion, among the topics in which ready interest was expressed were: advantages of standardized equipment, standardization of surgical dressings, reclamation of gauze, the hospital and the press, and the annual report. A question box followed.

Dr. Stephens Tells Value of Publicity

Dr. George F. Stephens, president of the Western Canada Hospital Association, delivered his presidential address at the Tuesday afternoon session, with Dr. M. T. MacEachern of Vancouver in the chair. Dr. Stephens considered two topics: Why is hospital treatment at the present time so expensive, and hospital publicity.

"There is no such thing as free hospital treatment except in heavily endowed institutions such as do not exist in Western Canada," said Dr. Stephens. "Someone must pay. Furthermore hospital treatment will continue to be expensive, for with each reduction in costs of commodities or wages or increased efficiency in management, there will be on the other hand improvements in service for the patient, which almost always means increased expense.

"A hospital like any other business should keep within its income. One then is faced with two alternatives (always provided due economy is exercised) either to curtail the service, or what is far more desirable to increase the income. This is where the question of publicity comes in.

"What can we do to let the public know why hospital treatment costs so much? Show them behind the scenes. The press is the broadest and most far reaching medium of publicity, although it frequently happens that the confidential character of the hospital's relation to the patient prevents full details being given and from the press point of view such expurgated information ceases to become news. Movies are an ideally educative medium and offer an easy method of reaching a large number of people in a telling manner, for facts and figures may be presented on the screen, or what is better still diagrams or pictures illustrating some of the hospital activities, each with its lesson attached. Other methods for publicity will readily present themselves, exhibits, a hospital tent at the local fair, etc. Direct visiting to the hospital is to be encouraged and in this connection National Hospital Day, May 12, offers a most appropriate opportunity."

Miss K. Cotter, superintendent of Dauphin Hospital, Dauphin, in her paper on "Social Service in the Small Hospital" regretted that in the province such a thing does not exist. With all the problems in the country which exist in the city and with no social service work in the small hospital, Miss Cotter expressed herself as envious of the work in progress in the large city hospitals.

The report of the committee on hospital accounting, presented by the convener, H. J. Martin of Children's Hospital, Winnipeg, took up the early part of the Wednesday morning session. The report dealt with the keeping of uniform accounts and the presentation of statements, and was well received. Free discussion followed.

"Principles and Practice in the Laundry" was the topic of an extremely practical paper presented before the joint convention by P. H. Hammond of the Winnipeg Laundry Company.

"It is the idea of the general commercial laundry," said Mr. Hammond, "that the average hospital laundry equipment is not perhaps just what it might be. For the small hospital which plans the installation of new equipment, the local laundrymen should have some valuable advice. The next most important thing to equipment is an intelligent supervisor who can get the best out of what you have. The cooperation of the rest of the hospital with the laundry, in getting the linen down in good condition at a regular rate, is important. You must have a uniform flow of work through your plant. It must come at regular intervals, be put out on regular time; outside of that it is a question of having each article handled the fewest times by the fewest possible persons, and of course that resolves itself into the arrangement of your machines and the question of intelligent supervision."

Following this paper, Miss Jessie Purvis of Portage La Prairie read a paper full of useful suggestions on laundry equipment and supplies.

Nursing Round Table Is of Value

Miss M. Martin, superintendent of nurses at Winnipeg General Hospital, conducted the round table discussion on nursing problems which with a paper on dietetics took up the afternoon session on the closing day. Among those who contributed to the discussion of present-day nursing problems was Dr. Richard Olding Beard of the University of Minnesota.

The concluding paper of the convention was read by Miss Gretta Lyons, dietitian of the Winnipeg Municipal Hospital, on "The Selection and Preparation of Foods."

A public meeting under the auspices of the Manitoba Medical Association held in one of the Winnipeg churches was largely attended by the delegates on Wednesday evening. Dr. Beard spoke at that time on the report of the Committee on Nursing Education and Prof. J. M. MacEachern of the University of Alberta, Edmonton, gave an address on "Some Aspects of the Subconscious."

In connection with the joint convention were exhibits of hospital, nursing and laundry equipment.

HOSPITAL AND MEDICAL ASSOCIATIONS OF SOUTH PART COMPANY

The fate of the Southern Hospital Association lies in the hands of a committee of four, appointed at its meeting in Chattanooga, Tenn., November 13-16.

The southern hospital organization was established two years ago as an auxiliary to the Southern Medical Association. After mature deliberation, it was decided by the officials of the medical association and the officers of the Southern Hospital Association that such an affiliation was not wise, and at the meeting in Chattanooga the two organizations were completely divorced. No hospital association of southern states now exists.

A committee was appointed at the meeting to study carefully the advisability of organizing a Southern Hospital Association, separate and apart from any other organization, unless it be the American Hospital Association. The committee consists of J. B. Franklin, Dallas, Texas; Dr. George Adkins, Jackson, Miss.; Dr. T. Z. Carson, Jacksonville, Fla.; and Walker White, Emory University Hospital, Atlanta, Ga.

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LETTERS TO THE EDITOR

NEUTRAL SODA VERSUS SODA ASH

To the Editor of THE MODERN HOSPITAL:

Comments that have been made in regard to the matter indicate that some readers have misconstrued certain statements, which, under the sub-title "The Choice of an Alkali," appear on page 69 of the current "Modern Hospital Year Book." I shall not attempt to determine what kind of an alkali it is best to use, but I shall endeavor to present the matter in a manner that will enable each person to grasp all sides of the subject and thus be able to come to a logical conclusion for himself. The different advantages and disadvantages must be weighed against each other, and each must thus form his own conclusion. The chemist for the Laundryowners' National Association is quoted as saying:

"Experimentation has lead to the conclusion that soda ash is *pound for pound* the most *effective* alkali of those commercially available, excepting caustic soda."

The italics in the foregoing are mine. Next, the chemist states that one pound of soda ash is equivalent to two and one-half pounds of neutral soda. The latter, it may be explained, is a combination of soda ash (sodium carbonate) and sodium bicarbonate, or cooking soda. Neutral sodas are sold under various trade names, all of which are familiar to laundry operators.

"Which is the better to use, soda ash or neutral soda?" Framed in the foregoing words, or in words just as meaningless, I, for thirteen years, as editor of a laundry trade journal, witnessed a debate of this question. And notwithstanding the fact that it is not a concrete question that can be given a categorical answer, it is still being debated. It is not a definite and determinable question, for the very simple reason that the word "better" is left unqualified. If we split up the foregoing moot question and convert it into several definite and determinable ones, we may be able to make a decision of some kind which fits our individual case. What is best in one set of circumstances may not be best in another, as we shall see. Let us, therefore, divide the question thus:

(1) Does one produce a better quality of work than the other?

(2) Used as prescribed, does one enable more rapid washing than the other?

(3) Does one pound of one do more than one pound of the other?

(4) What is the relative cost, based on the work that each will perform?

(5) If both are properly used, will one damage the goods more than the other?

(6) If improperly used, are either or both liable to damage the fabric?

I think that it is generally conceded that (1) there is no difference in the quality of the work, and (2) that each, used in the proper relative proportion, is equally rapid in its action. (3) As stated by the chemist, used in connection with a given amount of soap, one pound of soda ash will do as much washing as two and one-half pounds of neutral soda. (4) At present market prices, one pound of soda ash costs considerably less than its equivalent in neutral soda. (5) Reliable chemists who have made tests say that if properly used soda will not damage the goods, and all admit that neutral soda, even if used in excess, will do no damage, provided the temperature is not too high and the time too long.

When we come to the sixth question we come to the root of the trouble. Practically every chemist holds that an excess of soda ash, especially at a high temperature, will "tender" the goods. In other words, if soda ash is used wrongly it will do harm, but if neutral soda is used wrongly it is not apt to do harm.

A washroom is a chemical laboratory. If a laundry operator is in absolute control of his washroom, and if he sees that his employes faithfully follow fixed and proper formulas, he can use soda ash with safety, and by its use he can reduce his supply bill a small amount. In other words, the same care should be used in the washroom as is used in the pharmacy. I think that the chemist quoted had this condition in mind, for he spoke as a scientific man, not as an uneducated artisan, which is what the ordinary washman is most apt to be.

If one can have ideal conditions in his washroom, he can safely use soda ash, and thereby save a little money. But laundry operators in general hold that these ideal conditions are impractical, if not impossible, and as a "safety first" precaution they use neutral soda. They claim that the very small amount they could save by using soda ash instead of neutral soda is not justification for the risk incurred in using the less expensive material. It is not for me to say whether such men are right or wrong. Each hospital manager can easily determine for himself the best course for him to pursue, for each knows, or should know, how much his alkali is costing him per hundred pounds of washing done and what degree of care is exercised in the washroom. Carelessness and soda ash make a bad combination—an expensive one.

In the December issue of THE MODERN HOSPITAL, page 562, Mr. F. E. Chapman says:

"I have taken the trouble to consult by telephone a dozen of the larger laundries in Cleveland, and through them have received information as to the practice in other laundries, and I find that with three exceptions there are no laundries in Cleveland using soda ash. One of the three which is using it is a laundry which confines itself to the washing of overalls."

In all probability the same condition would be found

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in nearly every other city in the United States. As far as I have been able to ascertain, fully seven-eighths of the laundry operators use one of the so-called neutral sodas, because they regard it as being safer than soda ash. Some are beginning to use a powdered, or pulverized, soap (not soap-powder, however) to which the soda has been added by the maker, and it is highly probable that in some cases the added alkali is soda ash and in other cases neutral soda. Thus even the "safety first" operator may be using soda ash unawares.

Bleach is not used to remove the soda, as Mr. Chapman seems to think. The acid, or anti-chlor, bath, which follows the bleach bath and which precedes the blueing bath, neutralizes both the bleach and any soda that may be present. If both of the sodas are equally soluble, which is generally believed to be the case, both of them would rinse out equally freely. Acetic acid will do no harm to the goods, but oxalic acid, if not entirely rinsed out, may concentrate in spots and injure the fiber.

The grayness which he mentions is apt to result from the use of hard water, which causes water-insoluble compounds to form, such as lime and magnesium soap. Acetic acid, not bleach, should be used to remove this, the acid bath being hot and followed by a suds bath and proper rinsing.

One hospital superintendent deplores the fact that a small hospital cannot afford a water softener, and from this I assume that he is not aware of the fact that zeolite water softeners may be purchased in small sizes, even small enough for household use. These softeners have various trade names, such as Refinite, Permutit, Borromite and so forth, and any of these will save enough fabrics and soap to pay for itself in a comparatively short time. One may install one of these on such favorable terms that the saving will automatically pay for it.

If I may add a somewhat irrelevant remark, I will assert that the soft water question is more important than the soda question. In fact, if one has what is known as "zero" water he will have to use such a small amount of soda that he will have no soda question at all. —WALTER T. WILLIAMS, Cincinnati, Ohio.

Book Reviews and Current Hospital Literature

EVOLUTION OF PUBLIC HEALTH NURSING

By Annie M. Brainard, Editor of "The Public Health Nurse"; Lecturer on Administration of Public Health Nursing in Western Reserve University; President of the Visiting Nurse Association of Cleveland, 1913; Author of "The Organization of Public Health Nursing," Illustrated.[1]

During the last twenty-five years the growth of public-health nursing has been so rapid and the development of new fields of work so striking, that one is apt to think of it as a new thing, whereas it is really a blossoming of ideals and efforts that had their inception in the work of the deaconesses of the early Christian era. It is wholesome and sobering to trace the growth of these ideals through the centuries, to realize anew how many thinkers and workers have contributed to swell the volume and increase the value of the varied forms of service we group under the generic title of public health nursing. This is the task to which Miss Brainard set herself and she has succeeded so well that her book is a storehouse of facts gathered from many and widely scattered sources, and woven into such an interesting and readable narrative that one is loath to lay the book down even when the last page has been read.

The following list of contents indicates the scope of the material presented:

Visiting Nursing in the Days of the Roman Empire.
Visiting the Sick in the Middle Ages.
The Beginnings of Social Reform.
The New Humanity.
Sanitary Science and Preventive Medicine.
Kaiserwerth and the English Sisters.
Florence Nightingale.
The Founding of District Nursing.
The Founding of District Nursing in Liverpool.
The Spread of District Nursing.
The Metropolitan and National Nursing Association.
Queen's Nurses.
Early Visiting Nursing in America.
The Missionary Nurses.
Two Pioneer Visiting Nurse Associations.
A Period of Development.
Nurses' Settlements.
Specialized Visiting Nursing.
Social Training for Nurses.
The National Organization for Public Health Nursing.
War and the Public Health Nurse.
Aftermath of the War.
Public Health Nursing Today.
British Dominions and Elsewhere.

Miss Brainard has rendered to nurses a real service and given the field a volume that will serve to strengthen the highest ideals of nursing service.—C. E. G.

FOODS OF THE FOREIGN-BORN

By BERTHA M. WOOD, DIETITIAN, FOOD CLINIC, BOSTON DISPENSARY.[2]

In the food clinic of Boston Dispensary, Miss Wood has had an unusual opportunity to study the food habits of many classes of foreign born; seldom does one take advantage of an opportunity to so great an extent as she has. As a result dietitians have a book which gives information about the foods used by these various groups in their native land and some of their methods of preparation. It is not only a book of information, it is also a delightfully interesting story book, as each chapter contains some points relating to the home life of the country.

Miss Wood makes a strong plea for utilizing the most desirable features of each group when teaching them the new dietary which is necessary in this country. Changed living conditions, strange food materials, different markets, and limited incomes are enough completely to bewilder these people of limited experience. It is important that they be taught the best of our customs and not allowed to pick up the worst, as is often the case. This wholly different environment is a great handicap to them, says Miss Wood, and may be responsible for poor nutrition and many similar ills, due to improper diet, which are so frequently found by the doctor and dispensary workers.

Some of them come to this country sturdy and in good health, notably the Poles and the Slavic races who come from farms where out-door life and the products of the farm have given them "strong bodies and rosy cheeks." Here the foreigner usually begins his new life in a crowded district of the city and finds milk, fresh vegetables and meat too high in price to be considered in his daily fare. Consequently, he eats that which he finds in our market that can be bought for the money he has.

There is so little literature on this subject that all who are working with foreign-born people will welcome this book and find it a valuable help.—L. G. G.

[1] The W. B. Saunders Company, 1922.

[2] Whitcomb & Barrows, Boston, 1922.

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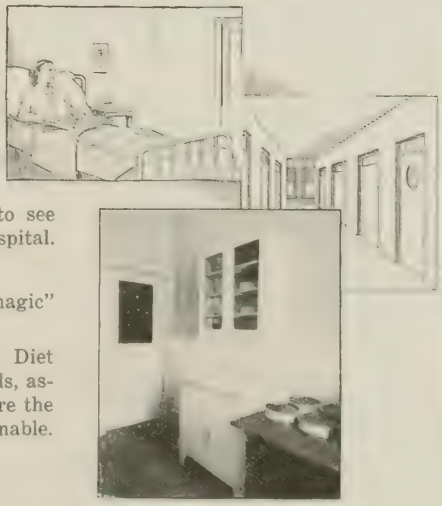

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Queries and Answers

SEPARATE KITCHEN FOR NURSES' HOME

To the Editor of The Modern Hospital:

There has recently been provided for this sixty-five bed general hospital a nurses' home with accommodations for twenty-five, located at a distance of some 150 feet from the hospital and at an elevation slightly above it. An open concrete sloping walk with a flight of six steps connects the buildings. We wish your recommendation with reference to the installation of a separate kitchen service for the nurses' home. The resources of the hospital kitchen are adequate to take care of this service, but this plan necessitates the transfer of food in special containers over the open walk. There is adequate equipment, likewise, in the nurses' home, should we find it essential to start a separate kitchen in operation there.

Director of a Pennsylvania Hospital.

Separate kitchens for nurses are generally in use only in very large institutions. The nurses reside three blocks from Grant Hospital, Chicago; two or three blocks from the Illinois Central Hospital, Chicago; a block from the Chicago Lying-in Hospital, all of which are new and modern institutions, yet their nurses' dining rooms are in the hospital and served from the hospital kitchen. Innumerable other examples of the same kind could be pointed out.

The cost of feeding patients and nurses is much larger for two kitchens than for one. Notwithstanding that you have the equipment in the nurses' home, it would see that the operation of a separate kitchen would increase the payroll considerably.

Is it impossible to provide a good dining room for the nurses in the hospital, and, if you consider it desirable for the welfare and happiness of the nurses that their dining room is in their home, would it be possible to change the six steps to an incline and use one of the better known food carts? You probably know that food can be stored or transported in one of these conveyor carts for several hours without cooling or becoming otherwise unpalatable. Of course the grade of the incline would limit the depth of liquids in the containers.

It requires only unskilled labor to transport the cart. It would consequently be cheaper than employing high priced skilled labor in another kitchen.

COLOR IN PRIVATE ROOMS

To the Editor of The Modern Hospital:

We have been asked by a building committee to take up with you the matter of color for private room painting. In all other parts of the hospital that are now being painted, we have used a pleasant warm neutral color, something between a buff and gray. In the private rooms, members of the women's committee want to use various colors in different rooms—blue, pink, etc. This we have advised against. We would appreciate your opinion in this matter. Architects.

This question is one that is frequently encountered in the decoration of hospital buildings. On this question my judgment coincides with that of the architects; I believe that a pleasant warm color should be used, but cannot see that any advantage would be derived from the use of a series of colors in different rooms. Pinks and blues, I think, are extremely undesirable, for while certain patients might think these colors agreeable, to others they would prove decidedly irritating, and the hospital cannot possibly know in advance the taste and temperament of the patient who is to occupy any given room.

The proposal to vary the colors in the different rooms is alluring, but it is deceptive, for after all each patient occupies only a single room, and if the color in that room is one which is pleasant and unobjectionable, nothing is gained by having a different color in some other room, which the patient in question never sees.

I sympathize with the desire to alleviate the harsh coldness and monotony that have been characteristic of hospitals in the past. When the decoration of a new building for private patients was under consideration recently this question came up, and while those in charge decided upon the uniform use of a warm neutral tint for all patients' rooms, a distinction was made between the patients' rooms and the corridors, and again between the patients' rooms and the service rooms. Thus three distinctly different color effects were introduced which are encountered in succession by visitors, nurses and patients as they pass from one part of the building to another; the varied effect was increased further by the distinctive treatment of the reception rooms.

May I suggest that the result which is desired can be obtained by the homelike treatment of the reception rooms; by using a different color in the corridors from that which is used in the patients' rooms; and, finally, by the colorful treatment, in the rooms of patients of hangings, table covers and rugs, all of which should be washable and all of which can be changed about or omitted at will?

S. S. Goldwater, M.D.

In a one hundred and fifty-bed hospital with a board of women managers, the executive committee of which met once a week, the superintendent was asked at one meeting if she did not think it advisable while the price of butter was so high to give the ward patients nice, clean lard sprinkled with salt. It is needless to say that the superintendent refused to confer any such treat upon her patients. The same board had one member who would make her official call early in the morning with her pet dog tucked under her arm. Dog Peggy's mission and duty on these inspections was to go under the ward beds and come out to his mistress and have his feet examined for dust. If any was found the superintendent would be reported at the following meeting as not properly looking after the housekeeping duties.

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XX. *February 1923* No. 2

BETTERING THE SERVICE OF STATE HOSPITALS*

THE mind that has lost itself; to what is it entitled in the way of care and treatment? The mind that is losing itself; to what is it entitled in the way of protection from disaster?

If the question were, what does the mind that has lost itself get, we should have to answer that this depends upon the state in which the mind lives. It may be liberty with medical care; treatment guided by intelligent reeducational methods; genuine hospital attention, with all that is implied in that broad generalization. Or, it may be imprisonment in straps and irons in a dungeon, with no medical attendance; or idleness with brutality and cruelty, representing mental, moral and physical decay.

But the mind that is losing itself? For it, there is some encouragement in progressive states in the activities of mental hygiene societies, mental clinics and dispensaries. These, however, too often are pinched for money and must depend upon private resources to do that which we have been accustomed to believe is the duty of the state.

State Hospital Standards Differ

It requires only a cursory survey of the situation to grasp the fact that there are at least forty-eight different standards—if they may be dignified by that term—of care and treatment of the so-called insane and feeble-minded. Even in the same state there may be as many different state hospital standards as there are state hospitals. Some states are interested in the problem of their mentally sick; others are dull to the plight of these sufferers and still others consider them with slight Christian sympathy.

Mental disease is one thing in one state, quite another in the next state, and still another in the third. The mental patient is fortunate to be a resident of one state. He is to be pitied above all men if he is the resident of a neighboring state.

But in those states that do the best by these types of sick there is failure, deep and humiliating. Their insane are crowded and packed into wards and dormitories; hundreds of them are idle throughout the year. After medical science has given them what it can, they are filed away and seldom referred to again. The pressure of the onrushing multitudes crowds the older residents farther and farther into the dark background. There is theory as to what should be done for them but of practice there is not much.

Stunned and incapacitated by the effects of the war, states and institutions which had embarked upon a program of betterment in the care of their mentally sick now mark time or slip behind. They lost morale; their organizations in all lines were broken up. Their medical staffs were depleted to meet the demands for neuro-psychiatric service at the front. Many of these men did not return to their old places, and the vacancies have not been filled because there is no reserve. The medical schools are not furnishing new blood; indeed they seem, as a rule, no more inclined than before to give attention to the mental diseases.

States confronted with organized demands from innumerable sources, created by the war, have yielded to these demands, whose insistence and persistence have been crowding the state hospitals and state charities into the background where they will remain until those who understand them and are their friends are able to resume that mili-

*This is the first of a series of articles on state institutions for the mentally ill which will be prepared under the direction of a special committee of the editorial board of The Modern Hospital, in cooperation with the National Committee for Mental Hygiene and Mr. A. L. Bowen, former superintendent of charities of the department of public welfare of the state of Illinois. Since the March issue is the annual building and equipment number, the next article of this series will not appear until April.

tancy and aggressiveness with which they were making such headway when the war broke upon them. These institutions must be brought back into the public, the legislative and the political eye.

Sees Improvement in Past 30 Years

Mr. Homer Folks, for many years secretary of the New York State Charities Aid Association, which has done so much to bring the state hospitals on New York State to a high development, and who is now president of the National Conference on Social Work, following a brilliant service with the American Red Cross in foreign lands, has stated the case with unusual clearness and brevity. In a letter to THE MODERN HOSPITAL, commenting on its decision to inaugurate a campaign to elevate the standards of state hospitals, he says:

"One can look back over the accomplishments of the past thirty years in caring for the insane with considerable pride. In New York state, and in many other states, this period has witnessed the development of genuine hospital care and treatment for all those suffering from mental diseases, as contrasted with the asylum, jail and almshouse care, or lack of care, which prevailed before this time. That these modern state hospitals have been able to return to the community a substantial proportion of their patients has proved the value to the state of making its work curative rather than custodial.

More Emphasis to be Placed on Prevention

"The next step, that of establishing out-patient clinics in connection with the state hospitals, for the purpose of preventing mental disease by treating such individuals as are beginning to break down under the increasing strain of repeated failure to adapt themselves successfully to the problems of daily life, has not only been significant in its results, but has paved the way for still further efforts of prevention in connection with the great social problems of delinquency, crime, dependency, unemployment and industrial unrest, and is in line with our present-day efforts to achieve for all an adequate standard of mental health. That mental diseases, like physical diseases, have definite causes and that through a knowledge of these causes there is hope for prevention and cure, is the message of the mental hygiene movement.

"Conditions following the war have resulted in a general retardation of the progress made by the New York state hospitals for the insane, if not in an actual reversion to lower standards. The extent to which this question exists in other states, together with a statement of the way in which such conditions are being overcome, would be of interest and benefit to all those interested in the problem. The series of articles on the subject of mental hygiene which begins in this number of THE MODERN HOSPITAL, should be effective in helping the various states to secure such medical treatment of the mentally disturbed as will insure the return to useful citizenship of the greatest possible number."

Mr. Folks confines his observations to New York but they may be applied with equal force to all other states that were making a sincere effort to improve the situation before this country entered the war.

$308,000,000 in Housing the Insane

Mr. Horatio M. Pollock, statistician of the New York State Hospital Commission, acting with the National Committee for Mental Hygiene, issued in 1921 a compilation of the statistics from twenty-six states. The twenty-seven state hospitals in these states averaged more than half a million dollars in expenditures for maintenance alone during the year. The general average per capita cost of maintenance was $315.28. The average population during that year of these seventy-seven institutions was 110,978. The total maintenance, therefore, was approximately thirty-five million dollars. It would be safe to double this to get an accurate estimate of the cost of all the state hospitals for insane in the United States. Large sums should be added for new buildings and permanent improvements. No account is here taken of the cost of those institutions which house the feebleminded, the epileptic, the delinquent of all ages, the poor farms and the jails, all of which are so very markedly impregnated with the mental disorders that they should be considered a part of this problem.

The seventy-seven state hospitals reporting represent an average investment of two million dollars, or one hundred and fifty-four millions in all. Multiply this by two and we have three hundred and eight million dollars permanently invested to "house"—we use the term "house" advisedly—more than two hundred thousand men and women whom we popularly stigmatize as insane, and are disposed to classify as hopeless and helpless, entitled only to food and raiment during their natural life.

General Hospital Conditions Never So Bad

Conditions which existed in general hospitals throughout the country and were responsible for the great standardization campaign were in no wise as deplorable and humiliating as those which,

on an average, prevail today in our state hospitals. The time has come when America, having regard for her good name as a humanitarian, demands that active and determined steps be taken to improve the institutional care and treatment of mental patients, and that means be adopted to treat mental diseases at a point where they may be halted and turned back.

Must Combat Public Indifference

The slight attention given to mental diseases in medical education, the indifference of the medical profession to these maladies, and the neglect by the public of those who have been stricken, call for counter action.

To whom must appeal be made? Manifestly to the hospital and the medical world. It alone can arrest attention and challenge present policies.

The campaign which is succeeding so well in establishing minimum standards in general hospitals gives encouragement that equally good results may be accomplished in state hospitals. The problem is a different one, to be sure. It must be approached from different directions. Another kind of tact and diplomacy must be invoked, but but there appears to be no serious obstacle in the way of building up in the United States higher ideals of state hospital service.

America has always been sympathetic toward the plight of the unfortunate. She has never failed when appealed to on behalf of the suffering. The more advanced states have not been niggardly in their support when they have had confidence that their funds for state hospitals were being applied intelligently and honestly.

Pre-war interest in this subject must be revived in those states which were advancing. Their example must be used upon the less diligent and the more inert.

The decision of THE MODERN HOSPITAL to inaugurate this campaign, and to carry it on through a long duration if necessary, has received most gratifying response from hospital men and women, from leaders in the medical profession and especially from those who have worked and are working so hard in the state hospital field under most discouraging conditions.

It is not proposed to suggest standards at this time. The first part of the campaign will be devoted to the situation as it exists, and to the principal problems which seem to require solution before medical standards may be thought of. The second part will be a review of one or two of the best state hospitals and of a few of those which are specializing with good results along certain lines. Third will come constructive suggestions and recommendations by experts in various departments in state hospital organization. Out of these three stages will develop quite naturally what may be considered a minimum standard which will justify any state hospital or state in claiming a place among humane agencies; in other words, a standard of mental hospital care and mental hygiene methods that may be comparable with that which is recognized in the care, treatment and consideration of physical diseases.

Conditions which existed in general hospitals throughout the country and were responsible for the great standardization campaign were in no wise as deplorable and humiliating as those which, on an average, prevail today in our state hospitals. The time has come when active and determined steps must be taken to improve the institutional care and treatment of mental patients, and means must be adopted to treat mental diseases at a point where they may be halted and turned back.

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The promise of THE MODERN HOSPITAL that its campaign will be systematic, that it will not be sensational nor an exposé, that it will offer no criticism until it is ready to suggest a substitute for the thing criticised, and that every step taken will be toward construction and upbuilding, has given a special pleasure to all who are interested, and has been cordially approved.

"The treatment of the mentally afflicted is becoming more and more a general hospital problem," writes H. E. Webster of Royal Victoria Hospital, Montreal. Dr. R. G. Brodrick of the Alameda County Hospital at San Leandro, California,

blames politics for state hospital stagnation. "The chief difficulty," he writes, "is politics, and their interference with well qualified men, properly performing their duties." Dr. W. L. Babcock, director of Grace Hospital, Detroit, analyzes the medical service of state institutions. He points out that over-emphasis of custodial care as contrasted with high class scientific diagnosis and treatment, low grade professional work, little or no constructive research and lack of scientific enthusiasm are among the leading difficulties against which the state hospital labors on the up-stream.

Miss Carolyn E. Gray, R.N., of Western Reserve University, Cleveland, is very glad that we are going to give this problem space. "Some of the state institutions," she says "and some of the conditions which I have found there fairly haunt me, and the worst of the situation is that there is so much apathy about the whole problem." Dr. Herbert J. Hall, of Marblehead, Mass., pleads for occupational therapy in state hospital discipline.

Dr. W. C. Rappleye, superintendent of New Haven Hospital calls attention to the many difficulties known to exist in state hospitals, "arising" he says, "from factors beyond the control of the hospital group, and unless some of these controlling factors are brought into proper perspective, there is some danger of doing injustice to those working under the difficulties." Dr. L. H. Burlingham, superintendent of Barnes hospital, St. Louis, mentions the same phase of the subject, when he advises against the expose type of campaign; "for I am afraid," says he, "that in many instances those in immediate charge would be blamed for conditions for which they are in no way responsible and which they have tried unsuccessfully to remedy."

One effect that an improvement in standards will inevitably produce is hinted at by Dr. George F. Stephens, superintendent of the Winnipeg General Hospital. "Following a severe expose of mental hospital conditions by a competent commission," he reports, "the province of Manitoba has advanced fifty years in its methods of care and treatment of mental sufferers, and our present problem is to cope with and find accommodations for the large number of definitely mental or psychogenic cases which now present themselves."

Dr. M. T. MacEachern of Vancouver, B. C., is optimistic over the situation, for he finds in the mental hospital field today "there is the influence resulting from mental hygiene studies, and our mental hospitals are becoming less custodial and more scientific in treatment." To Michael M. Davis, executive secretary of the Committee on Dispensary Development, New York, the field THE MODERN HOSPITAL purposes to enter seems "to be a fruitful one and timely," and Miss Ida M. Cannon, chief of the social service department of the Massachusetts General hospital, after discussing the need for agitation such as is planned, concludes, "I'll be interested to watch for it."

Dr. F. P. Norbury of Illinois thinks the campaign will bring the general hospital into closer touch with the state hospital which, in his opinion, is very desirable. He writes: "Your plan will be of great practical value, in fact of educational importance, to the medical profession, to the nursing profession and to the general hospitals." Amos W. Butler, for twenty-five years secretary of the Indiana Board of State Charities says, "I believe the thought you have in mind is a good one. The public needs to be informed; officials need to be improved and institutional workers need to be inspired and encouraged for better things."

Dr. Sidney D. Wilgus, formerly of the board of alienists of New York and later superintendent of Kankakee and Elgin State Hospitals in Illinois, declares the proposed series of articles will "prove of much interest and constructive value." Bromley W. Wharton, for many years secretary of the Pennsylvania Board of Charities thinks the idea and the method of presenting it excellent. He says, "This is a subject that should have the greatest amount of publicity and be discussed by specialists who are thoroughly familiar with the subject. A statement of the facts, with constructive criticism, will be of great benefit to the cause of those mentally afflicted." Charles E. Vasaly, now superintendent of the Minnesota Reformatory, but for a long time chairman of the state board of control says, "This should be not only interesting and valuable but stimulating, and I am sure will do a great deal of good."

"Our standards are still too low," declares Dr. George A. Zeller of the Peoria State Hospital, Peoria, Ill.; " 'pretty good for institution care' is an inexcusable expression. It will cost no more in money to raise the standard. The only outlay will be the exercise of closer vigilance, a greater regard for the patient's well-being and the determination that every dollar expended shall have some bearing upon the welfare of the patient."

Burdette G. Lewis, commissioner of institutions of New Jersey, is gratified that the subject is to be attacked in this manner and "thinks of nothing more timely than the proposed series of articles."

Dr. Herman M. Adler, formerly assistant director of the Boston Psychopathic Hospital and now criminologist of the Illinois State Department of Public Welfare writes, "I believe there is hardly a more important topic from the point of view of the general community welfare, which could be considered by your publication."

THE NEW PLANT OF THE VANDERBILT UNIVERSITY MEDICAL SCHOOL AND HOSPITAL

By COOLIDGE AND SHATTUCK, Architects, Boston, WINFORD H. SMITH, M.D., Consultant, Baltimore, G. CANBY ROBINSON, M.D., Dean, Vanderbilt University, Nashville, Tenn.

THE new plant of the Vanderbilt University Medical School and Hospital, Nashville, Tenn., has been planned with certain educational principles in mind. The plan has been developed with the idea of stimulating a coordination of the various departments of the laboratories and hospital in such a way that an intellectual interrelation may be readily developed and cooperation of departments may be effected. It is hoped that the physical continuity which will be established will go far toward eliminating barriers between the pre-clinical and clinical studies, and will allow all departments to exert a constant influence on the training of the future physician. The laboratories of the clinical departments are so placed that it will be possible for the heads of the various pre-clinical departments to exert a direct influence on the work done in these laboratories. It is planned to have the heads of the various laboratory departments assume responsibility for the standards of work and the quality of research done in their respective fields, no matter in what part of the school the work originates. Such an idea can be made effective only when the laboratories of the clinical and pre-clinical departments are adjacent. This has been accomplished in the proposed plan, while the proximity of the laboratories of the clinical departments to the hospital wards has been maintained.

Departments in Close Proximity

It is expected that the plant will possess not only the intellectual and educational benefits which should result from close physical proximity of the various departments, but will also allow an avoidance of the reduplication of laboratories, which has occurred in some of our medical schools, and which has increased the cost of their operation.

The teaching facilities of the school have been designed for the accommodation of classes of fifty students. Although the number of hospital beds provided by the plan is not as great as is consistent with ideal teaching conditions, it has not been feasible to build a larger hospital at this time. Future extension of the plant has been carefully considered, so that an increase in the student body may be effected at some future time. The foundations and walls of the hospital wards are to be constructed, so that an extra floor can be added to each wing in order to provide more adequately for pediatrics and obstetrics. Teaching facilities in other hospitals will be available and so will in part offset the somewhat meagre clinical facilities of the new plant. The extensive out-patient department which the plan contains will also minimize the disadvantages of the small hospital.

The buildings of the medical school are to be located on the south end of the campus of Vanderbilt University. It is fortunate that a site is available which will allow the medical school to be built as part of the entire university, as its nearness to the other departments of the university, especially those of chemistry, physics and biology, is considered highly desirable. The buildings will face the east on Hillsboro Pike, where there is a street car service, available for out-patients. The court containing the laboratories will open towards the north and face the main campus of the University, while the court containing the hos-

Study for the proposed Vanderbilt University Hospital, Nashville, Tenn.

pital wards will face toward the south. An uninterrupted development of the plant is arranged for in a westerly direction. The site of the medical school slopes down toward the Hillsboro Pike on the east, and advantage is taken of this difference in level by disposing the service in a basement under the eastern half of the building and leaving the western half unexcavated, so that the first floor of the building is uninterrupted by service.

The plant as now planned consists of:

1. The main building, containing the hospital and laboratories of the school.
2. The nurses' home.
3. The power house and laundry.

Main Building Houses Hospital and School

The main building may be divided for purposes of description into the hospital and the medical school.

The hospital will contain 163 beds and will have the following departments:

Administrative offices.
Staff living quarters.
Kitchens, etc.; and service.
Staff, nurses' and servants' dining rooms.
4 public wards, 30 beds each.
2 private wards, 27 beds total.
1 isolation ward, 16 beds.
Dispensary with departments of:
  Pediatrics.
  Neurology.
  Dermatology.
  Medicine.
  Eye, ear, nose and throat.
  Dentistry.
  Orthopedics.
  Obstetrics and gynecology.
  Urology.
  Surgery.
  Hydro- and occupational therapy.
An x-ray department.
An operating suite.

The medical school will contain the following departments:

Administration.
Anatomy.
Physiological chemistry.
Pharmacology.
Physiology.
Pathology, including museum.
Bacteriology.
Clinical pathology and hygiene.
Clinical chemistry.
Clinical physiology.
Clinical bacteriology.
Experimental surgery.
Library.
Animal quarters.

Laboratory rooms have also been provided for obstetrics and pediatrics.

Just north of the hospital building will be built a nurses' home to house 100 nurses, which will contain on the first floor an adequate assembly hall, practical demonstration room, two classrooms, library, reception rooms, kitchenette and a laundry for nurses' use in the basement. There are four floors of 25 bedrooms each, with a small lounge room on each floor; and a covered sleeping porch on the roof, where between 30 and 40 nurses can sleep in hot weather.

A power house and laundry will be built to serve this group, so arranged and placed that it may in future be enlarged to serve the whole university.

Details of Construction

The construction as planned contemplates building the exterior walls of brick, the floors of reinforced concrete and the partitions of terra cotta. The ceilings throughout will be unfurred except in the entrance lobbies and in those ward corridors where the ventilating system is run on the ceiling.

The interior walls and ceilings of the medical school and laboratories will be left unplastered, and will be painted directly on the brick or terra cotta, if any material saving can in this way be effected. The story height will be 12′ 6″ from floor to floor, giving a clear height of 10′ 6″ under the girders, which is the minimum which could be considered in this climate.

The usual 2′ vent and pipe spaces along the corridor walls will be eliminated in this building for purposes of economy. The ventilating system will be run on the ceilings of the corridors to vertical stacks at central points and thence to fan rooms on the roofs and in the towers.

The plumbing and heating pipes will be run on the exterior walls, where they can be installed more economically and will interfere less with the placing of furniture and cabinets, than if they were run on the corridor walls.

Water for domestic uses will be heated in the basement with steam brought from the power house.

Refrigeration machinery will be in the basement, and the brine will be piped to the various refrigerating centers which are superimposed on all floors.

Electric service will be brought in to the building at high voltage and transformed at four different points.

The exterior of the group will be treated in the collegiate Gothic style in red brick with the minimum amount of local limestone trim and detail. The design will depend for the most part upon the mass and silhouette of the building, and upon the proportions and grouping of the windows. What little decoration is used will be concentrated at a few points about the entrances.

Laboratory equipment has been kept as simple

as is possible without sacrificing efficiency. Complicated fixtures, built-in furniture, and a multiplicity of different types of furniture have been avoided. An effort has been made to devise standard forms of fixtures and equipment which may be used in any laboratory. Thus one type of table for microscopic work, one type of chemical table, and one type of chemical hood will be installed throughout.

Physical Areas of Three Buildings

The total length of the main building from north to south is 458′ 6″, and from east to west is 337′.

The cubic contents of the buildings are as follows:	
Main hospital and school building	3,390,000 cu. ft.
Nurses' home	400,000 cu. ft.
Power house and laundry	360,000 cu. ft.
	4,150,000 cu. ft.

In an analysis of tentative allotment of spaces, the following table shows the areas of departments, inclusive of exterior walls, partitions, corridors, stairs, etc.

	sq. ft.	
Hospital—		
Hospital administration	18,740	
Hospital administration includes lobby, etc., administration offices, etc., and staff living quarters.		
Service	36,170	
Service includes main kitchen, bakery, diet kitchen and adjuncts; main hospital storage, including food, linen, books, mattresses, patients' clothes, etc.		
Dispensary	30,200	
Dispensary includes all the regular dispensary departments including hydrotherapy, occupational therapy, admittance, social service and dispensary pharmacy.		
Wards	47,230	
Wards include all public, private and isolation ward units, solariums, connecting corridors and open porches.		
Operating suite	9,600	
X-ray	2,545	
		144,485
Medical school		
Pre-clinical depts.	72,065	
Clinical depts.	32,400	
Library	6,525	
		110,990
Total area		255,475

Areas and capacities of wards are as follows:

		sq. ft.	sq. ft. per bed
4 public wards, each 30 beds	120 beds	26,960	224½
2 private wards	27 beds	10,320	382
1 isolation ward	16 beds	5,895	368
Total	163 beds	43,175	264½

Approximate areas of the departments of the school* are:

	sq. ft.
Administration	5,750
Anatomy	16,435
Physiological chemistry	8,715
Pharmacology	8,715
Pathology	13,470
Bacteriology	5,290
Physiology	9,550
Experimental surgery	6,715
Clinical pathology and hygiene, Clinical chemistry, Clinical physiology, Clinical bacteriology, Lecture rooms	25,685
Library	6,525
Animal quarters	4,140
Total area of school	110,990

The laboratories consist of a series of units measuring 19x12 feet, and rooms may contain one, two or three such units. The size of a single unit was determined after studying a large number of laboratories in various medical schools, and it was decided that a room measuring 19x12 feet possesses dimensions which afford the greatest general adaptability, regardless of the type of laboratory work to be conducted in it. Of the twelve foot space along the exterior wall, eight feet is devoted to window space. It has been adopted as a general principal that nearly all the rooms of the laboratories should communicate with each other by doors at the corridor end of the rooms so that the wall space is unbroken in the better lighted part of the room, a point of considerable importance in laboratory construction.

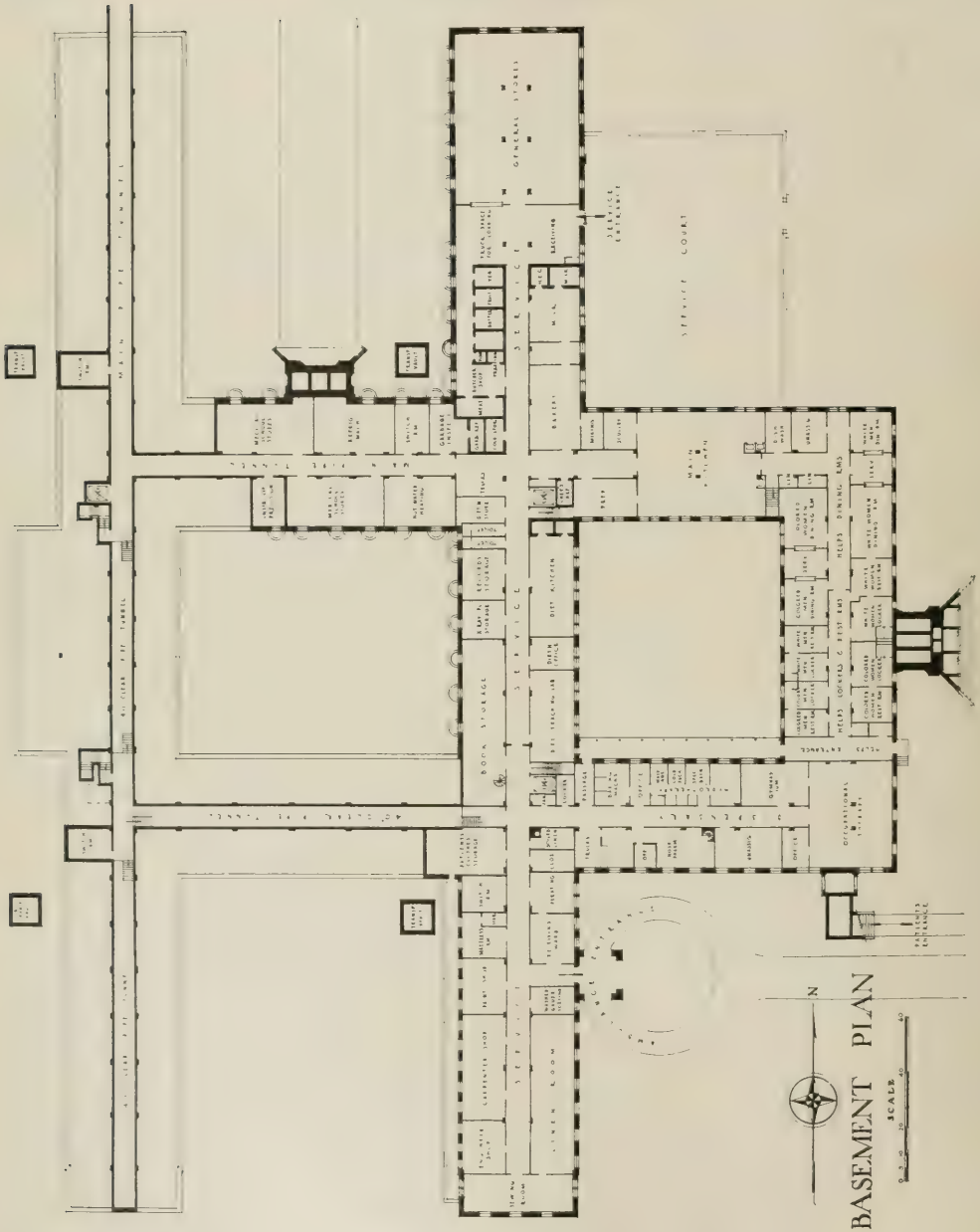
Basement Plan

The main service facilities are located on the basement floor and the striking feature is the close relationship of the various activities. This is particularly true with regard to the central receiving department, the central stores, and the butcher shop and refrigerated rooms, the bakery, kitchen, diet kitchen and dietetic laboratory. Attention is invited to the entrance for employes the ample provision for locker rooms and rest rooms, with the dining rooms for employes adjacent and in close proximity to the main kitchen. All of these features make for centralization of control and efficiency and economy of service.

The shops and central linen rooms are so located that all parts of the hospital are easily accessible by elevator.

The receiving room for ambulance cases, the hydrotherapeutic department, the occupational therapy department, and central pharmacy also

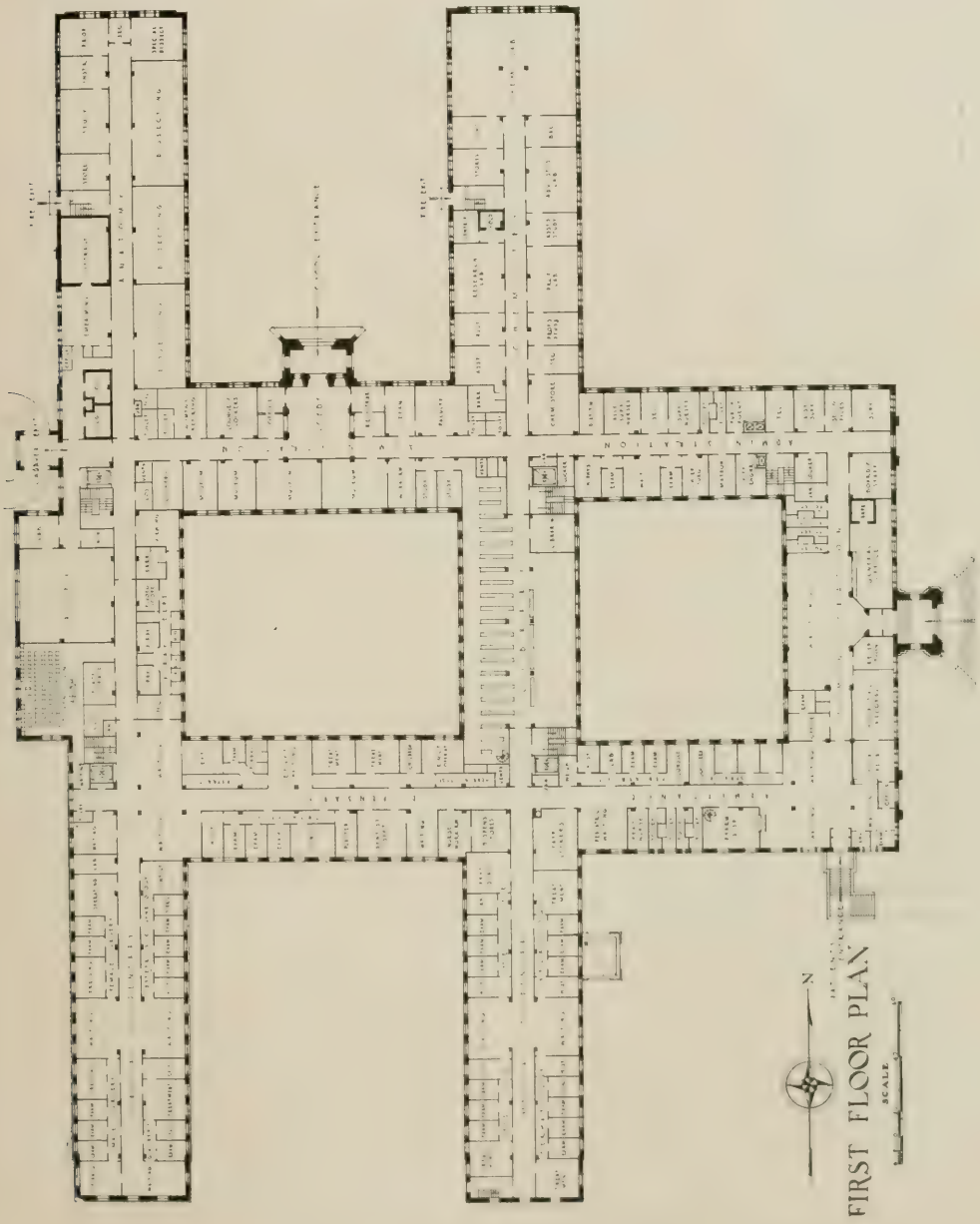
*Note: The school comprises all the regular school departments, including school administration, medical stores, etc., in basement, and animal house and yards on roof.



are easily accessible both to the hospital wards and to the dispensary. This central pharmacy serves the out-patient department located immediately above, as well as the hospital.

The receiving department from which all store rooms are accessible functions for all departments of the medical school and hospital. All supplies are brought into the small service court, surrounded by a wall, and are received at only one door.

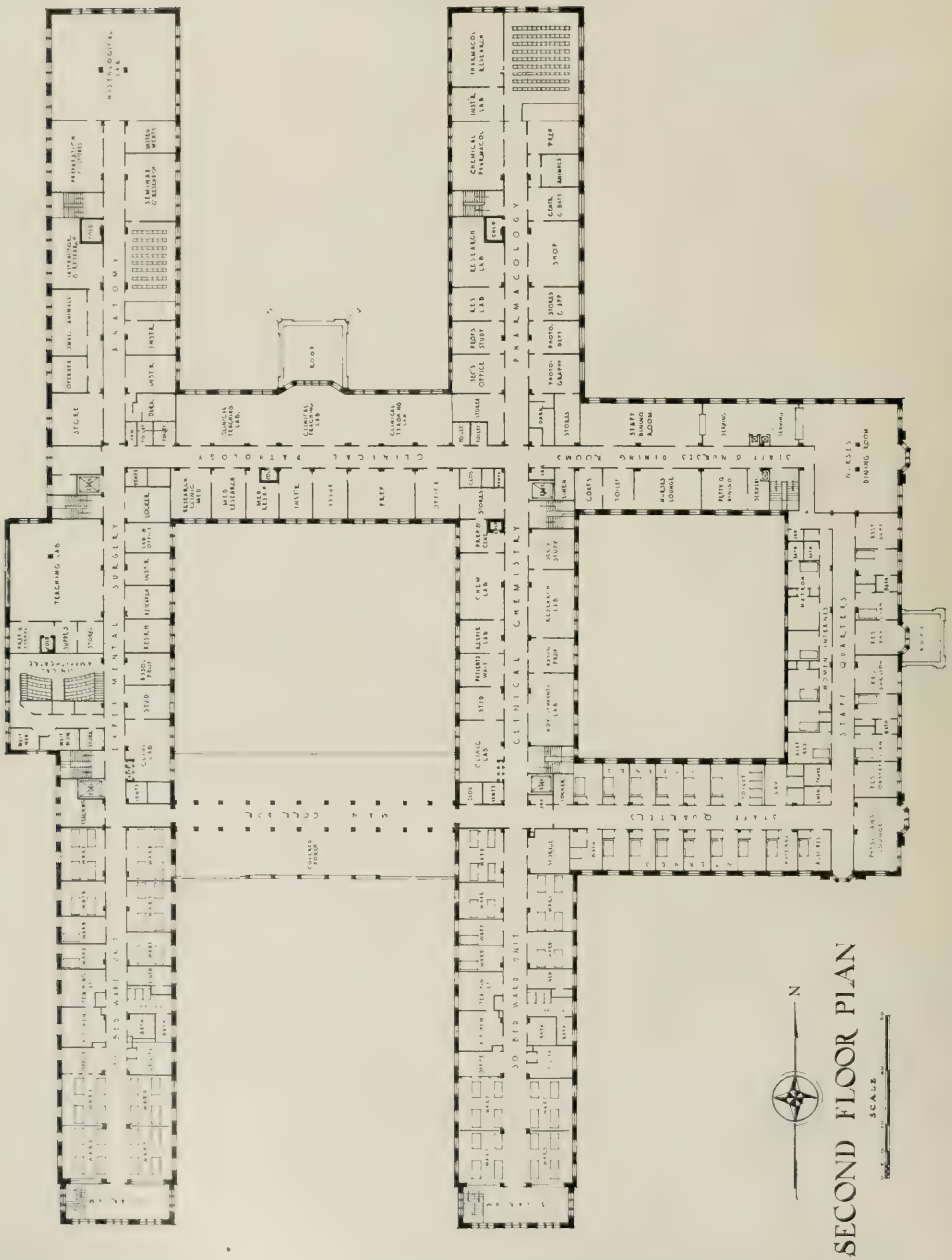
An important feature of this layout is accessibility of all departments. While each department



can be cut off and isolated by itself, there is nevertheless free communication between medical school, out-patient department, administrative office of the hospital, administrative office of the school and library.

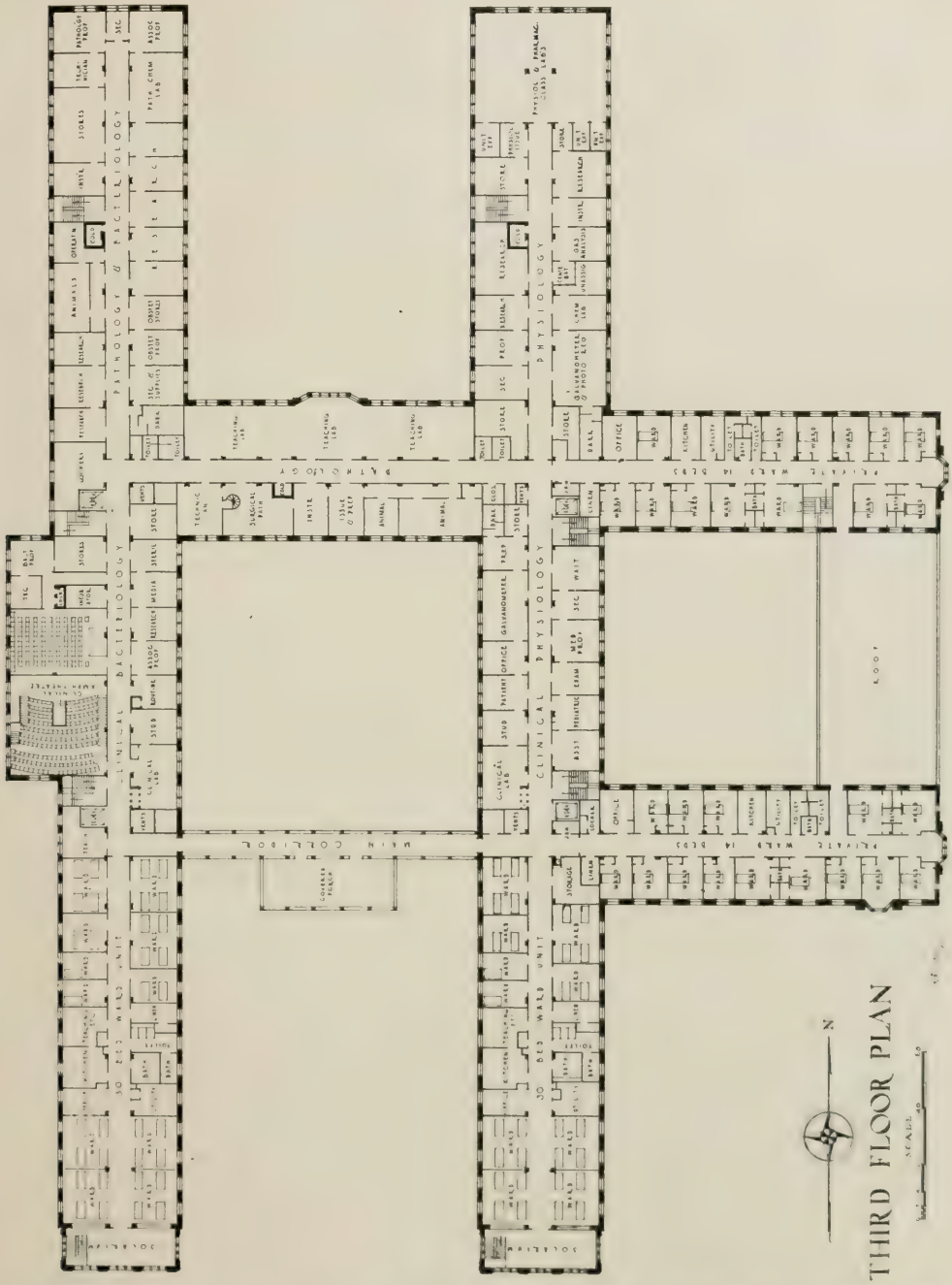
The relation of the admitting office of the hospital to the waiting room of the dispensary and to the social service is of interest, as well as the adjacent record rooms for the hospital and dispensary, which are desirable for the operation of the unit record system.

The x-ray department is placed in a position

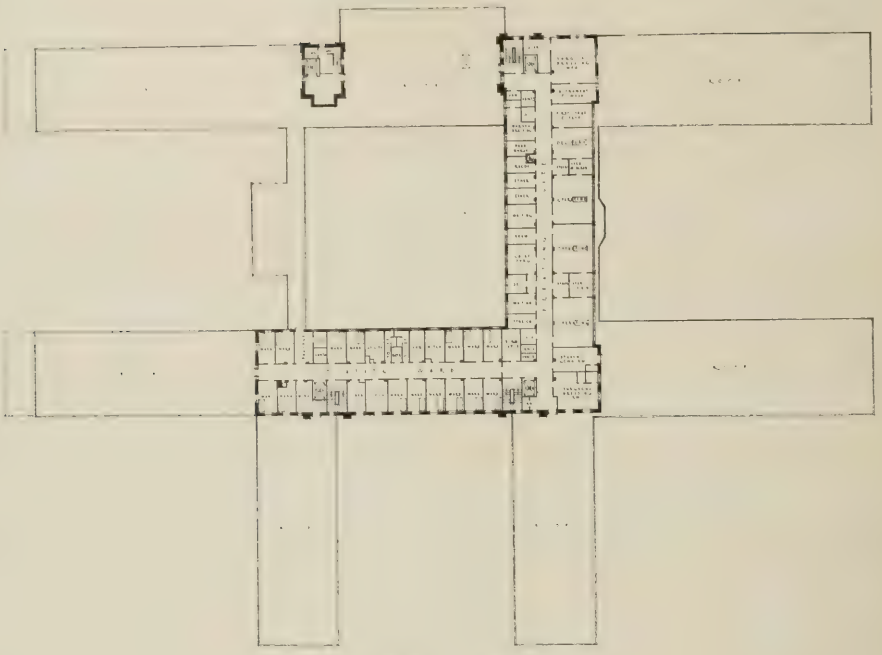


making it very convenient not only for the dispensary but also for the department of anatomy, where it has recently come to have an important use.

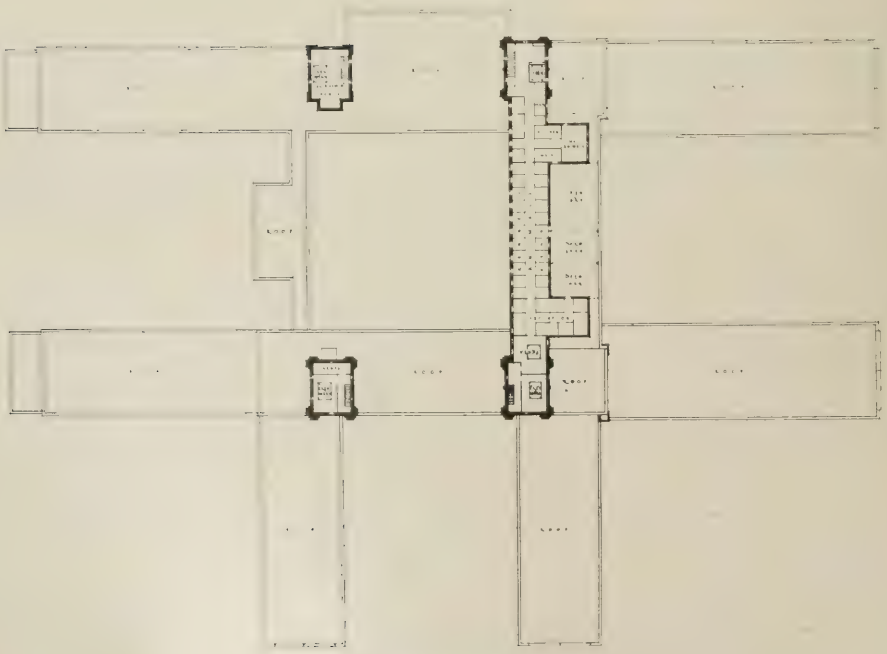
The same entrance and cold storage plant are used both for the bodies of patients dying in the hospital and for the bodies coming into the school for dissection, although the plans show that



separate rooms are provided for these purposes. The library and museum are so joined that one staff can care for the cataloguing, filing and issuing of both books and specimens.



Fourth Floor Plan



Fifth Floor Plan

The library is placed in the center of the building and is readily accessible to both hospital and school.

The medical dispensary is placed under the medical wards, while the surgical dispensary is placed under the surgical wards.

Second Floor Plan

The dining rooms for nurses, staff and petty officers are directly over the kitchen with dumbwaiter connection. They are also conveniently near the doctors' living quarters.

The distinguishing feature of the ward unit is the selection of 30 beds as a workable unit, and the arrangement of the 30 beds into an open ward of 16 beds divided into four cubicles of four beds each, the distribution of the remaining 14 beds into four-bed, two-bed and single-bed rooms, with all of the service of the ward located practically in the middle of the unit. This provides great flexibility in the selection of patients, segregation as to condition, disease or service. It also provides for service to all patients with the minimum amount of transportation, with a minimum distance to be traveled.

The laboratory of clinical chemistry is closely coordinated with that of physiological chemistry (on floor below) and pharmacology (adjoining).

The surgical laboratories are adjacent to the department of anatomy. They are directly over the x-ray department, and just below the laboratory of surgical pathology.

Clinical pathology and clinical chemistry adjoin, which is an advantage as these subjects are closely related.

The proximity of the doctors' quarters to the wards, the laboratories, the library, the dining rooms is noteworthy.

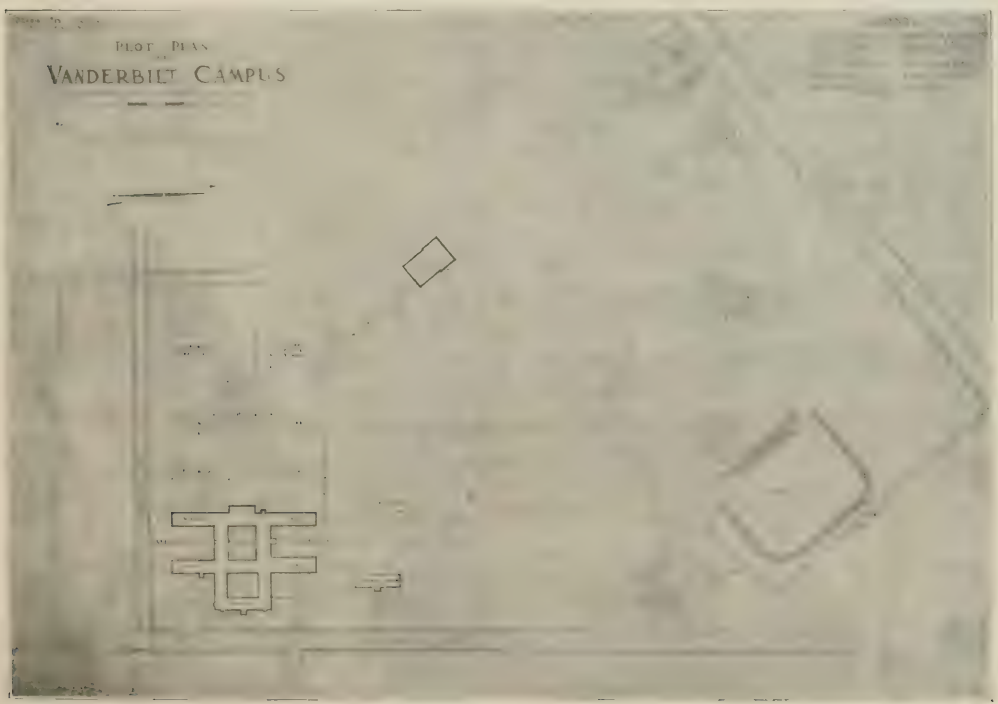
Third Floor Plan

The laboratory of clinical bacteriology adjoins that of bacteriology on one side and the surgical wards on the other. The laboratory of surgical pathology is directly under the operating rooms and is connected by a spiral stairway. The laboratory of clinical physiology adjoins the department of physiology on one side and the medical wards on the other.

Two private ward wings to the east are well placed with regard to exposure, accessibility, service and operating, and possess an attractive feature in the roof between them on which patients may be wheeled out in good weather.

Fourth Floor Plan

The operating floor, while somewhat larger



than would be required in an ordinary hospital, is planned particularly for a teaching hospital of an expected future capacity of 280 beds. It will be noted that the delivery department for obstetrical cases is provided on this floor under operating room supervision.

The isolation ward provides a minimum amount of space for such infectious cases as may develop within the hospital, or become necessary for admission from the dispensary. The space occupied by this isolation unit may be used for the expansion of the operating department in the future as the hospital grows, with provision made elsewhere for the isolation unit which could much more readily be moved than the operating department with its expensive equipment, flooring and plumbing.

Fifth Floor Plan

Animal quarters are placed over the operating suite. The question of noise is one to which considerable thought has been given, and it is believed this problem has been solved. The alternative would be the building of a separate animal house, necessarily at some distance from the school, which is considered to be undesirable. These quarters as planned would be shared by all departments of the school and would serve to house all animals except the smaller type which would be kept in the rooms set aside for this purpose in the various departments. All such rooms are provided with double corridors.

PAY CLINIC HAS BUSY FIRST YEAR

A digest of the report of the first year's work of the Cornell Pay Clinic, conducted in New York City by the medical college of Cornell University, contains some significant figures and statements.

It is the aim of the Pay Clinic to reach persons of moderate means who are unable to pay fees usually charged for adequate medical service for the condition from which they suffer, and who do not wish charity. In order to protect the private practitioner on the one hand, and not to duplicate the field covered by the free dispensary on the other, an economic classification of those who might properly be admitted was drawn up after much thought by members of the faculty of the college, with the aid of the staff of the Committee on Dispensary Development, and of economists and statisticians. Three factors are considered: (1) income, (2) size and responsibilities of family, and (3) cost of the type of medical service which is required.

The following classification is based upon the tabulation of nearly 20,000 consecutive cases:

Cases Admitted:	
Regularly in the Pay Clinic group (according to the social economic classification)	10,202
Temporarily in the Pay Clinic group:	
Because of unemployment, previous illness, or other financial emergency	207
Because of the unusual expense of the diagnosis and medical care required	26
On the border line or below the level of ability to meet the Pay Clinic fees, but admitted for various reasons	3,085
Doubtful, but admitted temporarily for a single examination or treatment, with decision as to permanent classification and admission suspended	874
No rating made	117
Admitted because of special interest as teaching cases	3
TOTAL	14,514
Cases Rejected:	
Unable to meet Pay Clinic fees	4,520
Able to meet fees of private physicians	322
Rejected for miscellaneous reasons	196
TOTAL	5,038

One of the features of the management of the Pay Clinic is the careful limitation of the number of patients in proportion to the medical staff available, so that the doctors shall have sufficient time to give complete and adequate attention to each individual patient. Even under the great pressure caused by the throngs of patients during the opening weeks, this principle was maintained. It is carried out in practice by giving each patient an appointment at a definite day and hour.

A fairly large percentage of the patients come to the clinic for the service of specialists directly. Also many of those going direct to general medicine are causes demanding the special skill of the internist. The average time spent by the doctor personally with each patient at each visit in general medicine is about half an hour; the average time for new visits is considerably more.

From the first, patients have been admitted for diagnosis when referred by a physician. They are then returned to the referring physician for treatment, or treated in the clinic, according to the wishes of the man sending the case in.

As to finances, the 113,981 clinic visits cost $231,875.40, exclusive of the cost of the new equipment, which was, of course, very high at first. The income from patients was $179,685.09; in other words, the average visit cost the clinic $2.03, whereas the average income per visit from patients was $1.57. The deficit has been met about half by the college and about half by the Committee on Dispensary Development of the United Hospital Fund. It is obvious that in order to meet fairly the obligation of giving the service to patients substantially at cost, so that they would not be accepting charity, the deficit must be reduced or the fees raised. Costs by departments have been worked out. Economies are being followed through when possible without impairing the quality of the work. The increase of the fee is under consideration.

At the end of the first year of the Pay Clinic it is still too soon, concludes the report, to speak with finality. The pay clinic is a sincere effort to meet a real medical need felt by many thousands of persons in this great community. During its first year the clinic has surpassed the expectations of the Cornell faculty, both on the medical side and in the number of patients. The one permanent essential to the success of any such enterprise is the rendering of a high quality of service. If, in addition, the clinic can contribute to medical instruction and research, can cooperate with the practising physician, can be made self-supporting, can be so managed as to eliminate the unfavorable, so-called "charity" atmosphere commonly associated with clinics, there is a great gain. But the clinic stands or falls on the rendering of a higher grade of medical service than can otherwise be secured by patients of moderate means at any rate which they can afford.

KANSAS HOSPITAL HEAD PASSES AWAY

Mother Superior Mary Josephine, for many years in charge of Catholic hospitals at Fort Scott, Hutchinson and Liberal, Kan. recently passed away at St. Joseph's Mercy Hospital, Liberal, while on an inspection trip there. Her death was due to angina pectoris. Burial was at Fort Scott.

HOSPITALS IN JAPAN

By H. J. HOWARD, M.D., and W. G. LENNOX, M.D., Peking, China.

MODERN medicine has been an important factor in opening the gates of the East. On account of Japan's commanding position in the Orient, the extent to which she has adopted and adapted western medicine is of interest to all who are concerned with the extension of the best methods for the prevention and cure of disease. Hospitals are excellent indicators of the status of medical practice. Therefore, the writer went to them to learn of medicine in Japan.

There are about 1,300 hospitals (of ten beds and over) registered with the Japanese Home Office. The writers decided to visit fifty of the more important of these in the leading cities. The distribution of hospitals visited is as follows: Tokyo 18, Osaka, 9, Yokohama 3, Kyoto 3, Nagoya 3, Shimonoseki 2, Kokura 2, and one each in Kobe, Sendal, Kanazawa, Okayama, Moji, Fukuoka, Niigata, Chiba, Nagasaki and Keijo. These eighteen cities have a total population of about 8,000,000.

The types of the hospitals visited are: Imperial university medical school 4, other governmental medical school 11, private medical school 4, city or prefectural general 4, government infectious 2, Red Cross 2, private general 7, private eye 9, leprosorium 1, tuberculosis 2, general hospitals under foreign control 4. These foreign-managed hospitals are not considered in the body of this paper.

Better Hospitals Visited

These institutions, located in the centers of progress and nearly half of them connected with medical schools, represent the better grade of Japanese hospitals. Visits were made without previous announcement. Two interpreters, one a Japanese theological student and the other a recent Imperial University medical college graduate, were used. In all instances save one, after proper introduction, permission to visit the hospital was readily granted and a guide provided. To these doctors and their assistants, who so courteously showed us about, great thanks are due.

One must bear in mind that the whole system of medical practice in Japan has been revolutionized in a single generation. Those who work in other Oriental countries can appreciate, as visitors fresh from the West cannot, the weight of public sentiment and prejudice which has been moved. Because of differences in social conditions, various modifications of the methods of western hospital management are to be expected. It is to be noted also that Japan has gone to Germany for her methods of medical education and practice. For example, in Tokyo the physicians trained in Germany number about 150, as against 30 trained in America and 15 in England. At the present time, however, Japanese are showing a greater interest in medicine in America.

Dispensary for ear, nose and throat patients of the Kyushu Imperial University Medical School Hospital.

There are two main phases of hospital work to be kept in mind. The first is concerned with the advancement of medical science, the second with the care and cure of those who apply to the hospital for healing.

About half of the hospitals visited have labor-

atories for research work. These include medical school hospitals (in some of these, laboratories are located in nearby college buildings), the Red Cross hospitals and a tuberculosis sanatorium. Those not providing space for research are, in general, the city and private hospitals. In addition to the hospital and medical school laboratories there are in Japan four institutes for research only. Laboratories are well supplied with workers and apparatus. The interest of the medical staff seems to center in them, rather than in the ward. One cause for the superior attraction of the laboratory is the ambition of every doctor in Japan to enter the "professor" class, which necessitates the preparation of a thesis based on original investigation. The large volume of work produced is reflected in the publication of not less than sixty medical journals. At the last Congress of the National Medical Association of Japan, about 1,600 papers were read. Unfortunately, because the barriers of language, little of this material is accessible to the rest of the world. This makes it difficult to judge of the quality of the work being done. Certainly the Japanese have made many notable contributions

Ward buildings of a tuberculosis sanatorium. The construction and arrangement are typical of most hospitals in Japan.

to medical science, particularly in the field of parisitology, bacteriology, pathology and biochemistry. With the present large body of men who are devotedly interested in research, and with the rapidity increasing facilities for such work, one may expect for the future even greater contributions. Most of this work is carried on in medical school laboratories or in research institutes, and is a subject which deserves separate consideration. This present study, dealing as it does with hospitals only, cannot do justice to the subject of scientific medical investigation in Japan.

Aside from laboratory research, hospitals furnish the opportunity of contributing to a knowledge of disease through the bedside study of cases. This field of investigation seems to receive far less consideration. Current Japanese literature contains comparatively few case studies. Such clinical studies are hardly possible without an adequate system of records, a point considered later, to which the hospitals pay comparatively little attention.

The majority of the hospitals in Japan have the following general arrangement: A large, two-story wooden building stands broadside to the

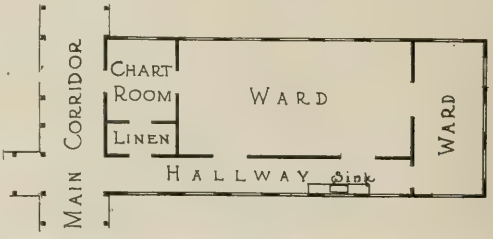


Diagram showing the arrangement of rooms in a building for ward patients.

street. In this are housed the business offices and out-patient departments. To the rear of this building and parallel with it are symmetrically arranged one or two story ward buildings, also of wood, with tiled roofs. Covered corridors connect the various wards. Three institutions are using buildings constructed forty or more years ago. The buildings of about half the hospitals have been erected within ten years. Elevators were installed in only two of the hospitals. Structures tall enough to require elevators are forbidden because of the danger from earthquakes. Three of the newer buildings are constructed in a style similar to hospitals in America. The new city hospital in Osaka is built of concrete, three stories and a basement, and is said to be the only fireproof hospital building in Japan.

Many hospitals have been destroyed in the fires which periodically sweep congested sections of the larger cities in Japan. Undoubtedly more fireproof buildings would be erected were it not for the very high building costs. We were told that this 700-bed hospital in Osaka is costing $4,000,000.

The arrangement of a typical ward unit is illustrated by the accompanying diagram. In some buildings, hallways extend along both sides of the ward so that none of the sickroom windows are on the outside. Floors are of wood and uncovered. Cuspidors are mounted on stools.

The main entrance of the hospital is a place of beehive-like activity. Patients and friends pass in and out freely at all hours of the day. All who enter must check their wooden clogs at the door and substitute straw or cloth sandles. As a result

of this excellent custom, floors require little cleaning and noise of walking is reduced to the gentle slap-slap of sandals.

Hospitals in Japan do not have the tidy, "picked-up" appearance one associates with the word "hospital." The plaster walls are usually unpainted. Flowers are lacking, the friends of patients preferring to send more useful gifts, such as food. Wards are crowded with visitors. Braziers and coal scuttles line the walls, dishes and medicine bottles and patients' food crowd the sinks. This is not true of all hospitals; the Charity Hospital in Tokyo, for example, is kept as shipshape as a man-of-war. This interesting hospital has been dominated by Baron Tokagi and his sons, who received their medical training in England. It and the associated medical school differ from other medical institutions in several respects.

Kaisei Private General Hospital at Osaka. The exterior of the building is stuccoed.

The disposal of sewage in the Orient is important because of the prevalence of intestinal infections. Only three of the hospitals visited, two in Osaka and one in Tokyo, have modern plumbing installed throughout. Several more have a few flush closets. The high cost of modern sewage disposal forces the other hospitals (about 90 per cent of those visited) to depend on latrines. These are placed in separate buildings, offshoots of the covered corridors which connect the wards. In most cases toilets for men and women are separate. As the cement floor usually is wet, patients when entering the latrine transfer to heavy wooden clogs. Closets are of the Oriental squat type, consisting simply of a slit in the floor, through which excreta drops to a pail or crock below; the resulting odors are not offensive to the Oriental patient as they would be to the Occidental. Usually the lower part of the building is enclosed, but in several, including two of the Imperial medical school hospitals, it is not, and excreta remains exposed to flies until the receptacle is full.

Toilet buildings or closets are not screened. Japanese police regulations require that cases of typhoid fever and bacillary dysentery be treated in contagious wards or hospitals. Even in these, no screening was observed. Hospital sewage, one is told, goes with the rest of the city sewage to enrich the gardens of the country side.

Running water is installed in four-fifths of the hospitals visited. The water is usually drunk unboiled.

In a country abounding with intestinal infections the manner of the preparation of food is of considerable importance. In most Japanese hospitals the kitchen occupies a separate building in the rear. In it are great wooden tubs, kettles of boiling rice, bare-chested, bare-footed coolies working on the wet cement floor. Visiting was done in midsummer, during a mild epidemic of cholera. Three of the kitchens were screened, though not effectively. Because of the menace of fire, cooking in several of the newer hospitals is done by steam.

Windows are numerous and wide. For this reason and on account of rapid rusting in the moist atmosphere, screening of wards is attempted in only three hospitals. About a third of the hospitals supply ward patients with mos-

quito netting. The loose construction of Japanese buildings permits ventilation, even with windows closed. One-half the hospitals have a central heating plant, usually steam; the others de-

Ward used by several departments in the Prefectural Medical School Hospital at Osaka.

pend, as do the ordinary Japanese houses, on small portable braziers. Two hospitals provide no heating facilities. All hospitals visited are lighted by electricity.

In about half the hospitals, operating rooms are ordinary rooms with cement floors. In the other half, floors and wainscoting are tiled and walls painted white. In five or six institutions, the rooms have sky lights. In two there is a system of artificial ventilation. In about half, the sterilizing is done with pressure steam. Stands for spectators, with one or two exceptions, were seen only in teaching hospitals in Tokyo.

The pharmacy in a Japanese hospital is a very large department, serving both in- and out-patients, and requiring in the larger institutions ten or fifteen dispensers. It is said that the income from drugs forms an important item in hospital revenues.

The largest of the hospitals visited has 750 beds, three have 500 beds, and one-third have 300 or more. The average number of beds in the institutions visited is less than 200.

The proportion of doctors to patients varies widely, from a ratio of one doctor to two and one-half patients in an Imperial University hospital, to one doctor to 58 patients in a tuberculosis sanatorium. The average of all hospitals visited was one doctor to six patients.

As concerns organization, the various departments are self-contained units, especially in the teaching institutions, where each department usually has its own record files, operating rooms, Wassermann and other laboratories, and library. Assistants do the work of interns. They receive small salaries of from $7.50 to $25 per month, do not rotate from one department or service to another, and may remain for an indefinite period of years.

The department of internal medicine is relatively more important than that of surgery. It controls more beds and is better staffed and equipped. The dental clinic is a comparatively recent addition to the dispensary in the West, so that it is not surprising that dental departments were observed in but two of the hospitals.

Concerning the quality of work done for patients, the observations were inferential rather than direct. Laboratory facilities for clinical examinations are much more limited than facilities for research. X-ray apparatus was found in all but four of the general hospitals, though in two others it was not in working order. In two of the Imperial University hospitals each of several departments possesses a plant. Apparatus is either of old German or new Japanese make. In most hospitals there is no special operator in charge. No electro-cardiograph for clinical use or respiration apparatus for determination of blood metabolic rate was seen. Much use is made of appliances for testing nerve conduction and for giving electrical treatments.

In the out-patient building, each department has several large rooms at its disposal. Instruction of students is given here, rather than in the wards. In most of the clinics patients seemed to get thoroughgoing physical examinations. The type of examination given to in-patients had to be inferred from perusal of the records. In half the hospitals, examinations are written out in detail; in the other half, usually city or private hospitals, records consist of a few words for the history

New building of the City Hospital at Osaka, said to be the finest hospital building in Japan. Wings are being added.

and a mark on a diagram for the physical examination. During the school year staff rounds are conducted twice a week. The doctor immediately in charge of a patient must see him at least once a day. The writers' visiting was done in the summer, and they did not encounter staff rounds and, except for a few occasions, did not happen

to find doctors working in the wards. Both acute and chronic cases are taken. In a ward of a university hospital, three of the patients said they had occupied a bed for one, two and eleven years respectively.

It was found that the "forbidden to enter" signs over doors to operating rooms applied to all but members of the staff, so that operating rooms in action were seen in half a dozen only of the hospitals. It seems the custom to flood operating room floors with water before operations, which requires surgeons and nurses to work in bare feet or to wear high wooden clogs. In one place they wore rubber boots. Rubber gloves were not seen.

Water in Japan is abundant and cheap. Rules of most hospitals permit patients to indulge their fondness for bathing every day in summer and every other day in winter. Hospital bathrooms, separate for men and women, are placed as offshoots of main corridors. The usual type of tub is a wooden tank about five feet square and four deep, capable of holding three or four persons. Some hospitals have separate tubs for staff and patients, others have different bathing hours. Three of the hospitals use porcelain tubs. One private hospital has a hydrotherapeutic department.

Main building of the recently completed Keio, Tokyo, University Medical School Hospital.

In many of the general hospitals outside Tokio, male and female patients occupy the same ward. The lack of privacy is intensified by the presence of visitors and the dearth of screens. As a rule, the number of visitors is unlimited and they may stay all day. In other words, they may practically live with the patient. The Charity Hospital in Tokyo allows visitors but a half a day twice a week. The Leprosarium never admits them. The wards seem crowded, not only because of visitors, but also because of the number of personal belongings which each patient provides. The following is one of the thirty-three rules for patients in a prefectural hospital: "The things the patient may bring on admission to the hospital are as follows: toilet paper, night gown, towels, washbasin, teacups, charcoal, charcoal scuttle, fire shovel, fire tongs, floor cloth, cushion, bed pan (if the patient is unable to leave his bed, and sleeping mat and bedding of attendant," Most hospitals furnish bedding, but do not supply garments, except to charity patients.

First and second class patients have private rooms, those for the former being suites of two rooms. In four or five of the general hospitals the private rooms are in Japanese style with sliding paper walls and matting covered floors. Practically all ward patients sleep on foreign spring beds, but about a third of the hospitals permit some or all of the private room patients to sleep on the floor. Almost none of the rooms have bureau or other drawer space, or chairs, yet they appear even more congested than the wards because more light housekeeping is done in them. Sometimes five or six members of the family may be dining on the floor beside the patient's bed. Provisions, dishes, extra bedding, coal scuttle, etc. lie on the floor beside the baseboard. Whether Oriental patients would get well faster under Occidental conditions of sick-room management is an open question.

About one-third of the hospitals visited serve all patients from the hospital kitchen. In one such hospital, however, the daughter of a patient said that she herself ate the food brought her father, and cooked other food for him. Two-thirds of the hospitals give the patients the option of furnishing their own food or of using that provided by the hospital.

As a rule, trays are prepared in the main kitchen and sent direct to the patient. Meals supplied by friends are brought in, ready cooked, from nearby restaurants, or are prepared over portable braziers in hallways or in servants' kitchens. Many wards are supplied with a huge teapot set on a brazier so that hot tea is always available. It should be remembered that the diet of the Japanese is comparatively simple. A typical hospital tray contains a small bowl of rice, a large sardine-sized piece of dried fish, a small boiled potato and a spoonful of baked beans. The staff may order special diets.

Almost all hospitals contain a store under hospital management, where one may purchase hats, fans, teapots, shoes, umbrellas, bedding, bedpans, fruits, candy, canned goods, soft and hard drinks, and almost anything which may make hospital life more pleasant.

In the Red Cross hospitals visited, there are nearly as many nurses as patients. In a tuberculosis hospital, there is one nurse to 8.7 patients. The average for the whole group visited is a nurse to 2.5 patients.

Several of the Japanese doctors complained of the quality and quantity of the nursing staff. The following are the reasons given; Nurses are ranked by the public in the class of domestic servants; the dollar a day pay of graduate nurses is less than they could get for work in the factories; girls of better education who receive training are almost sure to be lost to the hospital by marriage; missionaries discourage their students from entering training schools because of the reputed low moral standard of Japanese nurses; and there are a number of short term schools where girls may obtain nurses' certificates without having received any practical nursing instruction. As a consequence of this inadequate supply (or perhaps as an additional cause of it) most of the direct, personal care of patients is in the hands of relatives or untrained attendants. These may be seen giving food and medicine, carrying bedpans, and sleeping on the floor beside the patient's bed. Nurses take pulse and temperatures, dust floors, fill medicine bottles, etc. They wear unstarched, white foreign-style uniforms, sometimes without stockings and often without either stockings or sandals. Many look very young. Only a primary grammar school education is required for admission to the training schools.

Method of Keeping Records

Records are written in Japanese, or, in some of the teaching hospitals, in German. In the Imperial University hospitals, completed in-patient records are either bound or filed in boxes for permanent reference. In most hospitals, however, records are put away on shelves or placed in inaccessible store rooms. After a period of years they are destroyed. No card index of cases, nor person corresponding to an in-patient record clerk, was seen.

Out-patient records are filed serially and kept on shelves in the various departments. In one hospital there is a central record room where all out-patient records are kept.

Clerks in the business office list patients in books by number and by name. It was found that hospitals do not print annual reports. This is in part due to the fact that very little of the support of the hospitals come from contributors whom it is advisable be kept informed of the work being carried on. Also, printing is expensive.

In four of the hospitals visited all beds are free. In others the patients are divided into a number of classes. Charges vary, according to class and hospital, from 25c to $6 a day, with an additional charge for the ice, fuel, medicines, etc., used. A special student nurse costs 60c to 80c a day, according to the class served. Nearly all hospitals visited were filled to capacity. In the larger hospitals out-patients number from 200 to 600 a day. Out-patients are also divided into classes and pay a small fee for a series of visits. It is not the fashion in Japan as it is in America, for the rich to found and endow hospitals. Almost all the support of these institutions comes from public funds or from the patients themselves. Since the mass of the people cannot afford luxuries, it is essential that hospitals be conducted in as economical a manner as possible. For this reason one does not see the elaborate buildings and equipment found in many hospitals in America.

Professional Fees Do Not Vary

Research workers and practising physicians alike have very modest incomes. Fees for professional service do not fluctuate according to the wealth of the patient as they do in America. The same rates are charged to all and if the patient is able, he gives his physician a present. Certainly, the profession in Japan cannot be charged with greed for gain.

In one Imperial University hospital opportunity was given to speak with a number of patients in the medical ward. The following case is fairly typical: A boy of fifteen said he had occupied a free bed in the hospital six weeks. His complaint was stomach trouble and constipation. He was without friends in the city, so bought and cooked his own food, going to the street to provide himself with the rice, eggs and vegetables which constituted his diet. He kept his medicine bottle in a pail in the hallway sink, and took the medicine himself, carrying the bottle to the nurse for refilling when it was empty. He was asked if anyone spoke to him if he did not take his medicine, but the idea of disobeying instruction had not occurred to him.

No group corresponding to a social service department was encountered in any of the hospitals.

In hospitals connected with medical schools charges are lower than the average. Charity patients provide the material for teaching in both life and death. Each one on admission must sign an autopsy permit. Unclaimed bodies go to autopsy and then to dissecting rooms. Bodies for dissection are purchased also from poor relatives for from $2.50 to $10 each.

Red Cross hospitals number about thirty. Doctors and nurses are bound by vow to serve in

case of war. The Red Cross hospitals are the best equipped, with the best esprit de corps of any hospitals visited. The following observation illustrates their preparedness: the beds of patients who, in the event of fire, would need to be carried out are marked by large wooden tags, of a certain color. Those patients who would need assistance in walking have tags of a different color.

Contagious hospitals care for cases of typhoid fever, measles, bacillary dysentery, scarlet fever, diphtheria, cholera, smallpox, and meningitis. Rules concerning disinfection of the hands and feet of the attending staff are strictly observed, but less account is taken of flies. Bodies of persons dying in these hospitals are cremated.

One of the six government tuberculosis sanatoriums was visited. It is conducted with military-like precision. Research laboratories are particularly roomy and well equipped. When passing the wards one is given close-fitting masks to wear. The nurses and patients are supposed to wear them constantly to prevent spread of infection, but the superintendent complained that in hot weather he has difficulty in enforcing the order.

There are said to be 20,000 lepers in Japan, to care for whom there are ten asylums. Five of these are supported by the government, one by a Buddhist society and four from private funds. One of the latter, in charge of devoted Japanese Christians and supported by a British-American organization, was visited.

The few foreign controlled hospitals in Japan are primarily for the use of foreigners and are much like private hospitals in England or America. Two exceptions to the rule are St. Luke's

Tokyo Imperial University Compound

Medical ward of Tokyo Imperial University Hospital.

Hospital in Tokyo, and the hospital of the Severance Medical School in Keijo (Seoul). Those are designed to serve the Japanese and the Korean people. Those in charge feel that these institutions can be of use to the Japanese in at least two respects. First through using middle (high) school graduates and training them in an atmosphere of service, they should aid in raising the standards of the nursing profession. Second, they hope to center more of the interest of the staff on the patient and the problems of his care and cure. More specifically, they hope to demonstrate the value of "the Christian attitude toward the patient."

The authors' observations lead them to feel that such hospitals, conducted in a spirit of cooperation with other hospitals in Japan, can be of direct use to the Japanese and through them to the whole Orient.

RETIRES FROM HOSPITAL SERVICE

Thirty-one years of continuous hospital service ended last month for Albert M. Conklin, deputy superintendent of New York City Hospital, when he retired in accordance with the New York City Employes' Retirement System. Mr. Conklin's hospital career began on December 18, 1891, in the capacity of orderly.

On December 20, preceding his retirement, friends of Mr. Conklin held a reception in his honor at the hospital. Mr. Conklin's successor, Mr. Arthur J. Cote, presided as chairman at the meeting, and addresses were given by various officials. Dr. Charles B. Bacon, medical superintendent, spoke in behalf of the medical and administrative staffs; Miss Theodore H. LeFebvre, principal of the school of nursing, in behalf of the nurses; and C. G. Everett, in behalf of the employes. An autographed testimonial and $140 in gold were presented the retiring deputy superintendent.

Immediately following his retirement Mr. Conklin was married to Miss Mary Bell. He has purchased a home in Danbury, Conn. where they will live.

Debt fascinates, then destroys its victim. It is like the fawning host who graciously invites his guests to dine and then poisons them at the feast. Let us pay all our debts of affection, meet all our obligations of friendship, assume no undertaking we cannot fulfill and pay our bills one hundred cents on the dollar.

NEW CHILDREN'S PAVILION OF MOUNT SINAI HOSPITAL, NEW YORK

By ARNOLD W. BRUNNER, Architect, and S. S. GOLDWATER, M.D., Consultant, New York.

WHAT seems to strike the average visitor to the new children's pavilion at Mount Sinai Hospital most forcibly is the fact that every inch of the interior is bright, cheerful and airy, notwithstanding the fact that the building is surrounded by other hospital buildings, great and small.

The outside dimensions of the new building are 106 by 60 feet, the longer dimension extending from east to west. Seventy-five feet south is a three-story laboratory building; to the west, at a distance of about sixteen feet, is the two-story residence of the director, while to the east is the two and three-story children's dispensary (two stories at the extremities, three in the middle) with which the new pavilion connects.

North front of new Children's Pavilion of Mount Sinai Hospital, New York.

The desired capacity of a hundred beds necessitated the construction of four ward floors, twenty-five beds to a floor. The plan shows that the south and west fronts of the building are occupied by patients. In the south center is a sixteen-bed ward, divided in part by means of glass and metal screens of the conventional type into individual cubicles. To the right and left of the large ward are ample loggias. The west wing is occupied entirely by patients, and is divided into four small wards, each of which is subdivided into individual cubicles.

Altogether individual cubicles are available for approximately half the patients. The children's service at Mount Sinai Hospital includes both medical and surgical divisions, and for such a service 50 per cent of individualization suffices, for a considerable percentage of the patients are convalescents who with reasonable safety may be permitted to associate either in the ward, on the loggias, in the playrooms, or in the kindergarten. The degree of segregation or individualization required in a children's ward is always a question of interest, and occasionally extremists take the ground that complete individualization is essential, but in actual practice such rigid segregation, in a hospital devoted to the care of general medical and surgical cases, works unnecessary hardship and involves unnecessary expense.

The manner in which children are received and cared for during the earlier stage of their hospital residence is of vital importance to the sanitation of the ward. At Mount Sinai all ward patients, whether adults or children, are first cared for in the receiving wards of the hospital where segregation is provided for all suspicious cases, while for all children (except urgent operative cases) there is prescribed a preliminary detention period of twenty-four hours, during which time the history of the case is thoroughly investigated, home conditions ascertained, and necessary cultures and smears made, examined and reported upon. Following the detention period in the receiving ward, the child is advanced to one of the individual cubicles in the children's pavilion, and further advancement to one of the open or unprotected cribs follows in logical order.

The wards and loggias are screened. During the warmer months the loggias are freely used as auxiliary wards. Both the sixteen-bed wards and the three-bed wards have windows on three sides. The fourth side of the sixteen-bed ward consists largely of a glass partition separating the ward from the corridor, which has two double French doors and an additional outside window; in other words, there are three fresh air openings along the length of the corridor. These conditions favor natural ventilation. To guard against eventualities, exhaust ventilating ducts have been provided for all of the wards. These

are connected with a fan chamber in the attic above the roof structure. Thus far, in the wards of the main hospital, which are similarly equipped, the use of ventilating fans has not been found necessary, but it is not inconceivable that as the terior is extremely simple. The type of architecture chosen and the materials used, brick and stone, conform to the original group of buildings erected many years ago. While all the new buildings harmonize as much as possible with the older

A children's paradise is the playroom which adjoins the playground on the open roof at Mount Sinai's new pavilion for children.

character of the buildings in the immediate neighborhood changes, prevailing air currents may be deflected or diminished and mechanical aid to ventilation may thus become desirable. Apart from the duct system connected with the wards, there are exhaust ventilating ducts for the pantry, utility room, bath, toilet, and examining room, which, together with the playroom, complete the ward floor.

The continuation of the corridor on the lower stories affords direct connection with the adjoining dispensary building, the basement and first floor of which are occupied for dispensary purposes proper, while the floor above accommodates a twelve-bed overnight ward for tonsil and adenoid cases, with suitable operating facilities. Patients admitted to the tonsil ward enter and leave by the dispensary route, and thus have no contact with the occupants of the children's pavilion proper, although the supervising nurses of the pavilion are enabled, by virtue of the proximity and accessibility of the tonsil ward, to supervise this ward both day and night.

One of the illustrations which accompany this article shows the south and west fronts of the children's pavilion, with one of the sets of loggias conspicuous in the foreground. This picture makes clear the relation between the children's building and the surrounding structures. The north front is reproduced from the architect's drawing.

It will be observed that the design of the exones, the treatment has been greatly simplified and a minimum of ornament used, reliance being placed entirely upon agreeable proportions and delicate detail.

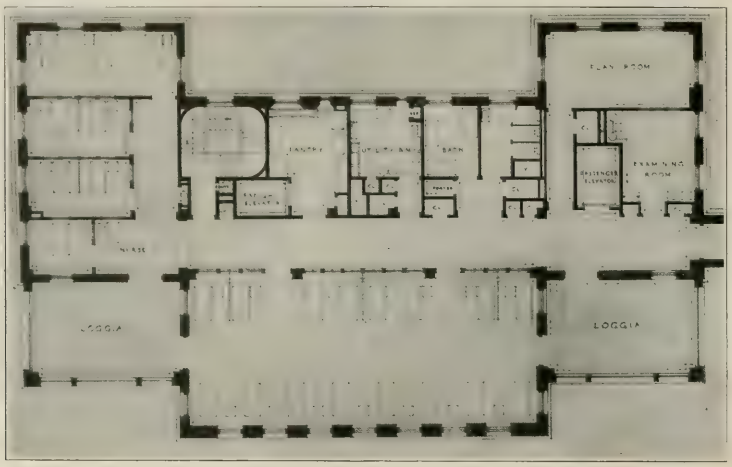
The placing of the cribs is shown in the two photographs, one disclosing the interior of a sixteen-bed ward, the other showing the desk of the head nurse in an alcove off the corridor, together with the whole series of small side wards, separated by fixed glass partitions. Another photograph shows the exceptionally cheerful main corridor, with the visitors' elevator in the foreground and the nurse's chart desk or control station in the extreme background; to the left is the glass partition separating the corridor from the main or sixteen-bed ward, and to the right the doors of the various service rooms, supply closets, etc.

Wards Finished in Mahogany and Cream

The floor of the side wards is finished in terrazzo; in the main wards terrazzo is used under the cribs, while in the center there is imbedded a nine-foot strip of battleship linoleum, edged with brass and bordered with ceramic tile. The walls are tiled to a height of 4'6", a blue strip separating the white tile wainscot from the tinted plaster surfaces above. The windows are double hung sash, with a small adjustable ventilator in the lower sash rail and a transom hinged at the bottom and controlled by a transom rod. The door trim and interior window trim are of flush metal.

The color scheme is mahogany and cream for the wards, olive green, cream, and French gray for the pantries, white for the examining rooms.

The general illumination of the wards is accomplished by means of indirect fixtures of dustproof design, but the night lights both in the wards and



Typical plan of ward floor, Children's Pavilion.

the corridors are enclosed in metal boxes inserted flush with the wall, placed at a height of 20″ from the floor; they throw a gentle light along the floor of the ward or corridor, as the case may be, the source of light and its distribution being wholly below the level of the patients' eyes.

Ventilation Suited to Patients

The nurse's station is in the corridor; the advantage of this location lies in the fact that at all hours of the day and night the free ventilation of the ward according to the requirements of the patient and not of the nurse can thus be accomplished. Since the ward is divided into five different units, a variety of temperatures may be obtained—cold rooms for pneumonia cases, for example, as required. The loggias, too, are available for stimulating outdoor treatment.

The head nurse's desk is strategically placed, so that the nurse, without leaving her chair, may view all of the sections of the floor which are occupied by patients; at the same time she commands the main corridor, so that the movements of her assistants as they pass from the larger to the smaller wards, or from the pantry, utility room, bath or examining room to the ward or vice versa, can be readily supervised.

The recessed part of the northerly front of the building is occupied by service rooms exclusively. First in order is the pantry (an illustration of which accompanies this article). The brine-cooled refrigerator, standing upon a sanitary base, may be observed. The double vitro-flint sink and drain boards, hung from the wall, are conspicuous in the photograph. There are two metal closets inserted on the outer wall, both ventilated by louvres; the first of these is for dish cloths and the like, the second for the garbage pails. A dish sterilizer, which, like the sink, is hung from the wall, is another feature of the room. A heated cabinet, with broiler and gas stove attached stands upon white metal sanitary legs of distinctive design. The cupboard and dresser are of olive green steel, resting on a concrete base 8″ high, the face of which is finished in tile. The countershelf is of Tennessee marble, turned up slightly at the back, so as to avoid an objectionable joint. The walls of

View of south and west fronts of Children's Pavilion, with surrounding buildings.

Corner of roof garden, Children's Pavilion, Mount Sinai Hospital.

all service rooms are tiled with white tile to a height of 5′ 6″, a line of color separating the white tile from the cream enameled walls above.

Built-in Fixtures Are Unique

In the utility room, the floor is of gray and white hexagonal tile; the bed pan sink and utility sink are hung from the wall; on the opposite wall are an instrument sterilizer, a marble shelf, a handbasin with elbow acting valve, and a combination specimen closet of a design here executed for the first time. Photographs of this closet are presented, one showing the closet closed, the other open. This closet is really three closets in one; the two upper sections are separate refrigerators, the topmost designed for 24-hour specimens of urine and the like, and the one next below being a chamber for cracked ice. The lowermost section has a simple metal door, a tiled floor, adjustable sanitary shelves, and a louvre by means of which it is directly ventilated; this closet is available for the preservation of stool specimens, etc. This entire closet is built into the room, is faced with tile and plaster in a manner corresponding to the wall treatment of the room proper, and is regarded by the nursing organization of the hospital as a valuable innovation.

The bathroom contains a tub bath on a pedestal, with a slab bath whose water supply is doubly protected, first by a thermostatic mixing valve, and second, by an overhead tank or reservoir, from which there is suspended an open-faced thermometer of specially large size and conspicuous markings.

Closets abound in and about the service rooms. Besides the linen closet, supply closet, cleaners' closet, drying closet, blanket-heater and bed pan warmer, there are special gown closets for visitors, both medical and lay. The examining room is equipped with instrument and water sterilizers, scrub-up basin, utility sink, and built-in metal instrument and supply cabinet; the sterilizers occupy a metal lined alcove, with exhaust ventilator above. Additional features are an incubator room on the third floor, which is automatically controlled both as to temperature and humidity; a milk room and pasteurizing room; a central linen room; a special diet kitchen; a dietetics classroom; glass-lined clothes chute; built-in medicine closet, with sink; illuminated call-box for house staff signals; corridor lavatories for the medical staff; a clinical laboratory, with alberene hood and work benches; quarters for wet nurses; a small semi-isolated research ward placed atop the connecting dispensary building; passenger and service elevators of large size, finished in bronze

Sixteen bed ward in Children's Pavilion, with one of its two connecting loggias.

Nurses' station and side wards.

and with terrazzo floor and sanitary base; cooled drinking water supply, with fountains in the corridors; gas emergency lighting system; flush glass-faced fire hose cabinets; special wiring for electrocardiograph; push button call signals for all side wards; suspended waterclosets for the larger children; water closets of special size for the smaller children; steel guards for all exposed corners in corridors; hollow steel doors for wards and service rooms; wheel chair guards in corridors; pivoted transoms over fixed interior sash in wards; roof equipment for actual nursing service.

Combination specimen and cracked ice closet. Closet open.

A playroom of ample size is located in a position remote from that section of the ward which is designed for occupancy by the more acutely sick patients. On the roof there is a large open playground, a covered roof section exposed at the side, and an indoor playroom or kindergarten, where a kindergartner is in daily attendance during the afternoon hours to amuse and instruct the convalescent children. Let the exuberant words of a recent visitor describe this room:

"What a Fairyland, up on the roof! Baby's eyes grow saucer-big as, entering a room, she is surprised with a sudden burst of color—lovely pinks and blues, browns, greens, yellows, on walls and furniture—and that color, upon examination, becomes all her story-book favorites. There on the wall is Cinderella in her gorgeous coach with driver and footman and four proud horses. And oh, that is Old Mother Goose with her crook, shooing white geese along a green hillock! Nearby, sailing the ocean blue in their wooden shoe boat are Wynken, Blynken and Nod, and Wynken is seasick. Further along, climbing his beanstalk to the giant's castle, is plucky Jack; while not far off, another Jack and Jill go up the hill with a pail of water. In the garden of 'Mary, Mary, quite contrary' grow—guess? Besides little flower faces, there are peppermint and lemon canes and . . . balloons!

"On another wall, in a windmill that looks as though it were really turning, is a pretty clock that tells real time, and on a lamp-post nearby is a real gas-jet that grown folks can light when it is dark and all other lights won't light and children might otherwise be frightened.

"And in the room itself—what heaps of fun! If you are not in a wheel chair, you sit in little blue chairs at small, brown-topped tables which match the floor.

"Forgetting all about sickness, and that you haven't seen even your mother since you've been in the hospital (so your temperature won't rise), you listen to stories told by white-robed ladies that the nurses call 'social-service-workers.' They also teach new games and songs, and take you out on the balcony to watch well children play in Central Park and to see the horseback riders. Or you can play all by yourself, for there's a screen that's the outside of a house on one side, and a bedroom, kitchen and living room on the other. And when you are through with your toys, you put them on the shelves of what, on the outside, is a barn with a haymow, dovecote, and horse and cow in their stalls. And who would think that pretty garden scene was a victrola inside! Or that pretty box a book-case!

Combination specimen and cracked ice closet. Closet closed.

"Somehow, after Convalescent Baby has visited Fairy-land, she rapidly gets better in the long white ward, dreaming and talking about the pictures, the color and the fun—each day anticipating the next afternoon's trip to the roof.

Ward corridor with ward to left, and service rooms to right.

Ward kitchen or serving room, Children's Pavilion.

Side of utility room, Children's Pavilion.

The total cubic content of the building, from basement floor to roof, excluding the roof structures and loggias, is 388,275 cubic feet. The total floor area of a typical ward floor is 5,225 sq. ft. The sixteen-bed wards are 23 feet wide, 54′6″ long, and 13′ from floor to ceiling. The ward windows are 4′ wide by 8·6″ high, transoms included.

REDUCING FIRE HAZARDS

Of interest to hospital administrators and boards of directors in connection with fire prevention is the following material from the insurance department of the U. S. Chamber of Commerce:

Exposure Hazard:

A study should be made of your premises to determine if they are surrounded by or exposed to property which is inflammable or otherwise hazardous. Reasonable means should be taken to minimize the physical exposure hazard of your property, such as fireproofing doors, windows and outside walls, extending fire walls above roof, and providing non-combustible roofs.

Construction:

A portion of your insurance rate is based on deficiencies in the physical construction of your property. A study should be made of these, such as unprotected elevator and other vertical shafts, horizontal openings, excessive areas undivided by fire walls and concealed spaces, and reasonable methods should be considered for correcting such deficiencies.

Protection:

Without adequate fire alarm and extinguishing facilities, the best located and constructed property may suffer from fire either in building or contents. So-called fireproof buildings are frequently ruined by burning contents. If a careful study is made of the deficiencies of your property in this respect and they are corrected—by installing metal waste and ash cans, fire buckets, chemical extinguishers, automatic sprinkler or standpipe systems—you will find the investment highly profitable.

Occupancy:

Certain dangerous fire hazards are inherent in every business. A study of the nature of your business should be made and proper care given to the isolation of material, machines or processes which may unduly occasion or accelerate fires.

Equipment:

Practically all property must be heated, lighted and ventilated. The equipment necessary for this, in addition to special apparatus required by the specific business or industry, presents a fire hazard. A thorough study of your existing equipment should be made with the idea of improving it where found advisable. New equipment should be studied before purchasing it and necessary improvements demanded.

Management:

A large proportion of American fire waste is caused by the careless accumulation of dirt and rubbish and by disorderly arrangement. A study should be made of the cleanliness of your property. Consideration should be given to the advisability of holding frequent fire drills in order that the employes may be organized to prevent, detect and extinguish fires.

Every property owner or trustee of property should apply the foregoing tests in his factory, apartment house, warehouse, store, hospital, school or home. He also should join any good community movement to carry out this program, to study and have prepared reasonable legal regulations whereby such correctives may be specified by law and finally to encourage public officials in the enforcement of such laws.

TO DIRECT HOSPITAL DIETETIC COUNCIL

The newly organized Hospital Dietetic Council, which is to concentrate its activities upon the special field of the hospital and dispensary, announces the following officers and executive board:

President, Miss Rena S. Eckman, University Hospital, Ann Arbor; first vice president, Miss Bertha Wood, East Northfield, Mass.; second vice president, Miss Mary Foley, Mayo Clinic, Rochester, Minn.; executive secretary, Mrs. John Henry Martin, Charles T. Miller Hospital, St. Paul; treasurer, Miss Margaret Fotheringham, Mercy Hospital, Pittsburgh.

Trustees, Miss Margaret Drew, Northern Pacific Hospital, St. Paul, and Miss Irene Willson, Homeopathic Hospital, Pittsburgh, whose terms expire in 1924; Miss Gertrude Thomas, University Hospital, Minneapolis, Minn. and Mrs. Dorothy Ayers Loudon, 415 Eighth Street, South, Moorhead, Minn., whose terms expire in 1923.

THE BRITISH VOLUNTARY HOSPITALS TODAY

By SIR NAPIER BURNETT, K.B.E., M.D., F.R.C.P., London.

The voluntary hospital system, Great Britain's heritage, is not to be discarded, says Sir Napier Burnett in the accompanying article. Lord Cave's commission in its recent report has crystallized public opinion in favor of the voluntary system and the past year has seen considerable improvement in hospital finances. The practice of industrial workers paying a small portion of their weekly wage to the hospital, known as the contributory scheme, has been found highly satisfactory. Pure insurance schemes are on trial, but have made little headway. "The hospital world has no trade secrets," says Sir Napier, and urges the establishment of facilities for the interchange of information.

THE British voluntary hospital system has been passing through a trying sickness. The prognosis, however, is favorable. I have confidence that the patient will recover.

The commission over which Lord Cave presided did much to steady public opinion. "The voluntary hospital system," says the commission's report, "which is peculiar to the English-speaking peoples, is part of the heritage of our generation, and it would be lamentable if by our apathy or folly it was suffered to fall into ruin." These words crystallized that great mass of opinion throughout the country which from lack of any very definite means of expressing itself is apt to be overlooked. Timely help came from three great funds—

1. National relief fund,
2. Joint war committee of the British Red Cross Society and Order of St. John,
3. Government grant of £500,000

—and the hospitals were given the breathing space they needed to adjust their finances to the altered circumstances of the time. Some there may be who see salvation only in the state. A state system of hospitals finds a place in the official program of the Parliamentary Labor party. For the present, however, the nationalization of hospitals may be regarded as in much the same category as a "levy on capital,"—a subject for consideration, not a settled policy.

In Scotland the feeling has always been strongly against state interference with hospitals. In one English provincial center only has there been an attempt to supersede the voluntary system, and there the experience has not been encouraging. In London such efforts as the Great Combined Appeal show that the hospitals are determined not to give up their voluntary status without a struggle. Here and there an isolated voice of despair may be heard, but it arouses little more than indignation against the speaker.

With the return of financial prosperity and its attendant creation of surplus wealth there can be no doubt that hospitals will prove as attractive a field for the generosity of the rich as in the past. After all, surpluses have to be spent in one way or another and human nature must undergo a profound change before sickness and the struggle against disease cease to excite the practical sympathy of the healthy and the well-to-do. In these circumstances it is impossible to feel despondent as to the future of the voluntary hospitals.

Already there are signs of better times and it is with considerable satisfaction that I quote from the report of the Committee of the King Edward's Hospital Fund for London for 1921.

"There is a common impression that the present financial difficulties of the hospitals are due to a decrease in income, that the charitable public is no longer able to give, and that patients who can afford to contribute are unwilling to give.

The facts are just the opposite. . . . The total income of the London hospitals increased from £1,470,282 in 1913 to £2,566,114 in 1921 (excluding grants from the Voluntary Hospitals Commission), an increase of nearly 75 per cent. The income from subscriptions, donations and similar voluntary sources rose from less than £700,000 in 1913 to over £1,000,000 in 1921. The income from patients' payments increased from £77,900 in 1913 to £420,020 in 1921. . . . . .

"In 1921 the total income of 113 hospitals from normal sources was £2,566,114 while the total expenditure was £2,776,603. Of these 113 hospitals 48 had surpluses amounting in total to £84,681 while 65 had deficits amounting in total to £295,170 making a net deficit of about £210,000.

These figures for 1921 show a great improvement over 1920 when the income amounted to £2,401,312 and the expenditure to £2,784,277 while 40 hospitals had surpluses amounting in total to £82,498 and 73 had deficits amounting in total to £465,463. The net total deficit has thus been reduced by over £170,000."

These London figures are eloquent especially when taken in conjunction with those for the rest of Great Britain. In 1921 in spite of the unprecedented extent of unemployment and general financial depression 51 per cent of the hospitals were able to make ends meet; the corresponding figure for 1920 was 44 per cent.

The figures of ordinary income and expenditure of 95 per cent of the total available hospital beds

in London, England, Wales and Scotland are as follows:

	1920		1921	
INCOME				
London	£2,401,312		£2,566,114	
England & Wales	3,972,943		4,093,777	
Scotland	793,988	£7,168,243	785,870	£7,445,761
EXPENDITURES				
London	£2,781,277		£2,776,603	
England & Wales	4,435,899		4,443,706	
Scotland	872,146	£8,092,322	855,079	£8,075,388
Deficit		£ 924,079		£ 629,627

The year 1921 shows a reduction of deficit of 32 per cent compared with the year 1920.

Mass Contributions

One of the most noticeable developments of the past two years is the general appreciation of the value of mass contributions of small amounts from the working classes and considerable attention has been directed to what are known as contributory schemes. At first there was hesitation due to an uneasy feeling that to accept money from those who were to benefit from their contributions was not in accord with the voluntary system. That feeling has passed away.

Contributory schemes are not of recent origin. One of the earliest dates back more than 40 years ago. It is still in existence, raising £45,000 out of a total income of £100,000. It rests upon a dual basis. Primarily it is an appeal to the heart, secondarily to the head. It is upon this duality that success depends. If the heart is left out, the scheme is reduced to one of insurance pure and simple, and the interest of the voluntary worker cannot be excited; if the head, then there is a return to the old purely charitable gift which can no longer keep hospitals running.

The scheme originates in this fashion. An enthusiastic chairman with the aid of an appeal secretary approaches the great mass of the working population through their various associations, mine lodges, the workmen's clubs, etc., and obtains leave to address meetings. He puts the hospital case forward. He tells his audience what the hospital does. He invites visitors to the hospital. He personally conducts them over the building when they come. If there is no suitable organization, he seizes the dinner hour and gives a ten-minute address, or he goes down at night and talks to a meeting of the night shift men. He appeals to local patriotism. He tells how the hospital comes to the aid of those struck down by accident or disease. He lets it be known that last year the hospital relieved so many men, women and children from that particular mine, shipyard or industry in which the orange box from which he speaks happens to be standing. He states what these patients cost the hospital. Money must come in, he says, if the work is to go on. Each member of his audience appreciates these two facts:

(1) That a comrade or comrade's wife or child may need the help of the hospital at any moment.

(2) That he himself may be struck down by accident or disease, and if there is no hospital, what is to happen to him?

The emphasis is on (1) but (2) enters in. At the end of his address a resolution is passed that 1d or 2d (two cents or four cents) per man be given each week to the hospital. Whenever possible the cooperation of the employer is enlisted to allow the deduction to be made at the pay office and sent in each quarter to the hospital. This method of raising money is highly satisfactory. Some hospitals receive as much as 45 per cent of their ordinary income from it. As a rule a contributor if suffering from a complaint suitable for hospital treatment is admitted free of charge. Custom, however, varies. In some cases a contribution carries with it an explicit guarantee. In others there is no guarantee, though in most there is a tacit understanding.

In essence the successful schemes are the same; but in minor respects they differ according to locality. The methods and machinery for an agricultural area differ somewhat from those suitable to an industrial.

Those contributory schemes which follow more or less insurance lines and which pay the hospital the full cost of treatment of only those contributors actually admitted are still on trial, and so far have not made much headway.

More Attention Paid Administration

Today in England far greater attention is being paid to the science of hospital administration. Boards of management and hospital secretaries realize that the old stock assurance, "no further economies compatible with efficiency are possible," will not do. The public requires facts and figures, not assurances. The stress of competition has forced commercial organizations to devise new methods of management and control of costs. The increased interest of the public as well as financial stringency is gradually teaching the same lesson to the hospitals. It is now known that there is something to be learned from business organization although as yet no definite system has been evolved.

Better methods of control of consumption are being worked out. Some more convincing basis than "cost per occupied bed" is being sought. There is much in a name and the man who can invent a term for a system analogous to that known in commercial life as "cost accounting," and applicable to hospital work will earn the gratitude of all. Hospitals have little or nothing to do with

such matters as the location of losses and profits, the comparison of methods of manufacture, bases for tendering, etc. Cost accounting, however, is not confined to these purely commercial operations. It goes further. It places the power of locating waste and inefficiency in the hands of a manager and it creates interest in the minds of intelligent employes in their work. The problem is to find some system applicable to hospitals that will give similar results. I have every confidence that in time this problem will be solved.

Before, however, asking boards of management generally, to incur expense in the clerical labor involved in any new system it is necessary to be able to do more than make out a paper case in its favor. Some remarkable and praiseworthy efforts made by the administrators of individual hospitals have shown gratifying results and justify the belief that there is a side of hospital work to which business methods may be applied with success. I would, however, strongly deprecate any premature action. Good systems are of slow growth and advance may be retarded by enthusiasts who expect too much themselves and sometimes lead others on to disappointment.

Cooperative Buying

Much the same may be said of cooperative buying. In time I feel that this too will in a large measure be established, but at the moment boards are slow to move. Advance would seem to lie along the lines of greater interchange of information regarding purchase and prices between hospital administrators.

To buy supplies well is as important as to use them economically when bought. The argument that is too frequently put forward by word of mouth—I do not think I have ever seen it in print—that it is an obligation on a hospital board to purchase goods from their local supporters, will not bear examination. Price and quality are the criteria, not locality. Subscriptions given to hospitals in order to obtain custom would be an exploitation of charity. I beg leave to doubt the prevalence of the custom, as I beg leave to doubt the validity of the argument that subscriptions would be withheld unless orders were secured. Good buying is a skilled operation and deserves a greater share of the attention of the managers of hospitals. It is difficult for the smaller hospitals to obtain as advantageous terms as the larger and it is to these that some central organization might render great service.

Alterations in the sources of support have brought into prominence the necessity for improvement in the system of registering patients. Details formerly of little moment must now be carefully registered and summarized. General statements, bald numbers, are insufficient. The appeal department requires complete, accurate and up-to-date information with regard to the work done. The clerical labor means increased cost. The expense, however, is justified by the results.

Justified too by results would be an improvement in the annual reports which boards of management issue to the public. These for the most part are uninteresting and incomplete. The casual visitor to a large modern hospital is astounded at the extent and variety of its activities, and even in the smaller hospitals there is going on day after day work of which the public, speaking generally, has little or no knowledge. All that the public knows is that the cost per bed is going up, and waste or extravagance is inferred.

The work of a large hospital is of absorbing interest to all, yet the scientist, the student of human nature, the general public, will find in the annual report little food for thought. One of the most interesting and human documents in this connection that I have recently come across is the report of the almoner at one of the large London hospitals. Unfortunately it was published not in the general report of the hospital but as a separate pamphlet and it has only a very limited circulation.

Need for Paying Wards

There is a large class in England sadly unprovided for; a class that is neither rich nor poor, yet on whose purse the cost of providing treatment falls heavily. When sick they have either to suffer at home or to lie at one of the private nursing establishments, where the facilities for diagnosis or treatment are not in any way comparable to those of a large hospital and where the general weekly charge is often far above their means.

Few of the larger hospitals have any surplus of beds, and the provision of paying wards would mean building. However, the cost of building an annex of ten beds would not be excessive, and in any case an addition might be made to the weekly charge to cover interest on capital expenditure. It is here that insurance might most usefully step in, arrangements being made by the insurance companies with the hospitals for the admission of those who had taken out policies covering the cost of treatment. The payment of medical or surgical fees is a separate matter altogether and should be the subject of private arrangement between patient and doctor.

The London hospitals are fortunate in having a central fund—King Edward's Hospital Fund for London—which annually distributes large sums

of money and which prepares and circulates valuable hospital statistics.

No such organization exists to help provincial hospitals. At the annual meeting, however, of the British Hospitals Association at Liverpool in May, 1922, a resolution was passed approving of the formation of such a fund and asking the council of the association to take the matter into active consideration. The request embodied in the above resolution of the assistance of a central fund, coming as it does from the hospitals themselves, is one that cannot lightly be put aside. Altogether outside the financial advantages that would result from such a fund, there is this most important aspect of it—it would aid greatly in breaking down that disastrous policy of isolation that has done more than anything else to retard hospital advance. In the past hospital administrators have worked in almost total ignorance of any institution except their own; not from lack of desire to know, but solely because there has been no channel through which they could readily get at the knowledge. I can speak from intimate personal experience of the reality of this desire on the part of hospital boards and hospital officers. Were a central fund to be (as I hope) established, its existence would be more than justified as a bureau of information on matters relating to all branches of hospital work—construction, equipment, prices, standards of consumption, standards of staff, schemes for raising money and so on. I hope that in my next report of the hospitals of Great Britain I may be able to say that the establishment of a central fund for the provinces is an accomplished fact.

Insufficient Attention to Feeding

The feeding of a patient is one of the most important factors in treatment, yet it is one to which in this country at any rate, insufficient attention has been given. The surgeon lavishes the utmost care upon his technique, his instruments, his appliances and the dressings he uses. The quality of the lint, gauze or wool is carefully considered by him. The physician exercises similar care in the domain of drugs. Not only must these conform to a standard of purity that might almost be called absolute, but they have to be administered in quantities that call for great accuracy in measurement.

Nothing is left to chance. All is carefully watched and recorded. I hold that the kitchen is as important to the medical profession as the laboratory, that the quantity, quality and the method of presentation of food to the patient are as important as dosage and the quality of the drugs or the variety of the dressings. The ordinary hospital dietary provides breakfast in many cases insufficient. Were it not for the gifts of eggs, butter and jam brought in by patients' friends, there would not be enough. Whether the patient should be fed on English or foreign meat is generally decided by the lay committee on the ground of cost. A mistake in the dispensary is always a subject of grave inquiry. The quality or the cooking of food must reach a high pitch of badness before inquiry is held or censure given. The routine hospital division of diets into ordinary, special and milk, even when supplemented by haphazard additional extras, is inadequate. Cost has played too great a part in the feeding of patients and quality too little. I confess that I am not impressed when I am told that the average cost of feeding a patient works out at 11d or 1/ per day. I would strongly urge that the doctors should have at least as much latitude in the feeding of their patients as in the prescribing of drugs. The monotony of institution feeding cannot but react unfavorably upon the patient. I would like to see in hospitals a kitchen committee going into such matters as the quality of the provisions bought, the equipment and staff of the kitchen, the preparation of food and its presentation to the patients, and the preparation of special diets; a standing committee with regular work to do, not merely one called together when complaints are made and it is necessary to defend the hospital in the eyes of the public.

I would like to see the example of America followed, and a trained dietitian introduced into each large hospital to assist the doctor and work out for him diets suitable to the complaints of the individual patients. The bulk of patients, of course, require nothing more than good plain food well cooked, but in every hospital there are those to whom feeding may make all the difference between cure and discharge unrelieved. In few hospitals is there any machinery to provide that which may be as essential to cure as many of the expensive instruments and devices readily (and rightly) granted to the operating theater. The cost of food per occupied bed might go up. If so the money would be well spent.

I welcome this opportunity of telling our friends in America something of what we are doing here. From my recent visit to America I saw much and learned much. In the hospital world there are no trade secrets. There is need, however, of facilities for the interchange of information.

"The strength of a nation is in its multitude, not in its territory; but only in its sound multitude, and it has been the madness of economists to seek for gold instead of life."—John Ruskin.

RADIATION THERAPY IN THE MODERN HOSPITAL

By HENRY SCHMITZ, M.D., F.A.C.S., Chicago.

TREATMENT of diseases with radiations obtained from x-rays and radium has assumed great importance. Probably no other branch in modern scientific medicine has received a like degree of attention and interest from the medical profession and the laity. No other specialty in medicine demands higher skill.

The diseases for which rays are employed are many. They comprise the various skin lesions; many forms of blood diseases, as spleno-myelogenic leukemia, polycythemia vera; the diseases of the blood forming organs and the glands, for instance the lymphglands, the bone marrow, the spleen; the diseases of the ductless glands, as the pituitary, the thyroid, the thymus, the ovaries, the testicles; the tuberculous infections of the bones, the glands, the lungs, the abdominal and the pelvic organs; other infections such as pseudo-leukemia, actino-mycosis; and finally the vast field of benign and malignant new-growths. It is almost impossible to enumerate all the affections to which radiations are applied either to give amelioration or to obtain positive cures.

Cancer diseases have received the most interest from the medical and allied professions. The frequency of occurrence and the unsatisfactory results of the methods of treatment formerly employed account for this intense interest. The writer does not desire to create the impression that surgical treatment of cancer is not efficient. Quite the contrary! It is indicated and will permanently cure these cases in which the malignant growth is absolutely confined within the organ or tissue of primary occurrence. Only then can surgical treatment eradicate all the cancer tissue, hence render a permanent cure.

Therefore the writer intends to discuss the treatment of cancer disease from the viewpoint of a surgeon and radiologist. A large proportion of cancer cases can be benefited only by the use of massive radiation treatment.

Must Hospitalize for Radiation Treatment

The subject may be discussed by perusing the following questions: Does radiation treatment of cancerous tumors require hospitalization of the patient? If so, how may the hospitals meet the requirements for highest efficiency in carrying on the treatment?

Modern massive radiation treatment necessitates a careful examination of the patient and a proper preparation and skillful nursing before and during the treatment and convalescence. The history must include all the presenting symptoms, the time of onset and the physical characteristics of the disease, as well as the personal history and family history; while the examination must note the general state of health and a careful special examination. The latter should state the extent of the cancer disease, whether it is clearly localized, has invaded contiguous or distant tissues and organs, or has become generalized.

Localized malignant disease justifies a surgical eradication if it is amenable to such treatment. Cancers that cannot be attacked with surgical measures or that have involved contiguous or distant tissue and organs should not be subjected to surgical treatment as it is unlikely that all of the diseased tissue can be eradicated. Such cases should be transferred to radiation therapy which offers better results. Generalized carcinomata, of course, must be treated symptomatically. They cannot be temporarily or permanently benefited either by surgery or radiation therapy.

The importance of the preceding paragraph must be clearly emphasized. The indications for surgical therapy of carcinomata are so clear cut that one rightly should assume that only the clearly localized cancers are treated in the surgical clinics. If we would consider in our actions the interests of the patient first we would act accordingly and soon would obtain much better results in the surgical statistics. The majority of patients surgically treated would then recover permanently. The efficacy of the surgical treatment would markedly advance. The patient would readily consent to an operation, knowing it promises him permanent relief. Quacks, osteopaths and Christian Scientists would lose a large clientele.

Preparation of Patient for Treatment

Operations performed on advanced and generalized carcinomata only add to the unbearable misery of these unfortunate beings. Cancer cells are disseminated, tissue breakdown with subsequent fistulae formation is hastened. Instead of relief, a multiplicity of symptoms is added. On the other hand radiation therapy properly applied in advanced carcinomata frequently relieves pain especially in bone metastases, arrests bleeding, improves edematous swellings in the extremities of shoulder and arm in breast cancer, and of the groin and legs in pelvic cancers, etc.

Preparation of the patient for treatment comprises a thorough evacuation of the gastro-intes-

tinal tract; the diet before, during and after treatment should be liquid. The patient also should receive daily during the same period of time 30 grain doses of sodium bicarbonate and the juice of three oranges every four hours; water should be given freely per mouth, a hypodermic injection of ½ gr. of codeine sulphate given one-half hour before the treatment should place the patient in the mental and physical equilibrium necessary for the prolonged ordeal. During and following the days of treatment the diet must remain the same. If vomiting and diarrhea are severe they must receive proper attention consisting of rest in bed, large doses of bismuth subnitrate and sodium bicarbonate, rectal flushings with starch water containing tincture of opium. A dose of castor oil will often work wonders if the patient can retain it. Rectal feeding or hypodermoclysis may be necessary in obstinate and severe cases. Tincture of opium should be added to the rectal nutritive enema to arrest peristalsis. Finally the patient must be nursed during convalescence by being given nourishing bland foods, plenty of sunshine and tonics, particularly iron and arsenic. Daily routine blood and urine examinations and recording of temperature, pulse and respiration are important. A return of the blood to normal is perhaps the best sign of a successful outcome of the treatment and the subsequent favorable course of the disease.

It is evident, therefore, that patients requiring radiation therapy should be hospitalized. Hence it is necessary for the hospital to provide the facilities to carry out such treatment. They comprise the proper equipment, the necessary space for the housing of the department and the proper personnel.

High Voltage for Deep-Seated Cancer

Extensive or deep-seated carcinomata can only be treated with x-rays obtained from high voltages. Such apparatus is very expensive. The voltages permissable in the operation of x-ray tubes depend on the load the latter may safely carry. This limit at present is 200 to 220 kilovolts maximum. When manufacturers can furnish tubes which can carry higher loads the apparatus must be able to furnish voltages to meet this requirement. The intensity of the x-rays depends on the voltage. The intensity of the hardest rays is especially increased by the employment of higher voltages. In spite of stronger filtration, an erythema is obtained in a very short time. By a correct combination of voltage and filter a hard and homogeneous radiation is obtained, which is necessary to attain the desired action in the depth of the body. Let us consider the possibilities of two different radiations of low and high voltages:

A 140 kilovolt x-ray applied with the proper factors, i. e., 5 milliamperes, 65 cm. focus skin distance, 0.5 mm. copper plus 2 mm. aluminum filter, and fields of 20 cm. sq., requires on an average a fourteen hour application of x-rays using four ports of entry in the treatment of cervical carcinoma in a patient having an antero-posterior diameter of the pelvis of 18 cm. A 200 kilovolt x-ray of 5 milliamperes, 50 cm. focus skin distance, 1 mm. copper plus 1 mm. aluminum filter, requires only four hours with two ports of entry; and a 240 kilovolt with the same factors as the 200 kilovolt x-ray requires about three hours. It is a fact observed innumerable times in our work that any kilovoltage can give radiation sickness. However, the longer the time duration for the application of the treatment, the more marked and intense is the radiation toxemia following.

280 Kilovolt Transformers Recommended

Hence it follows that we must recommend transformers that give 280 kilovolts and the output of which can be increased by connecting additional units in series to increase the output when better Coolidge tubes are provided. Otherwise a transformer that is modern today may be antiquated in the near future.

Other important parts of the equipment are the table and tube stand. They should be made preferably of wood without any metal parts and also be provided with means to protect the patient from all stray radiations that emanate from the tube or arms.

The ceilings, walls and floors of the room in which the tube is operated must be carefully and properly lined with lead sheeting of a thickness of 3/16 of an inch; while the observation window for the operator should consist of three thicknesses of standard lead glass. Ventilation is very important. Large ventilators must be installed to change the air in the treatment room rapidly and continuously.

How much space is necessary for transformer, tube stand and table, and room for the operator?

In Fig. 1 are the floor arrangements of the radiation therapy rooms at the Mercy, Augustana and St. Mary's Hospitals in Chicago which are under the author's direction.

Problems of Installation Vary

The problems of installation were different in each institution. Though we can operate two tubes from each transformer at the same time, we did not deem it advisable to do so now. We can treat in each institution four patients every other day, provided the tumor can be successfully ra-

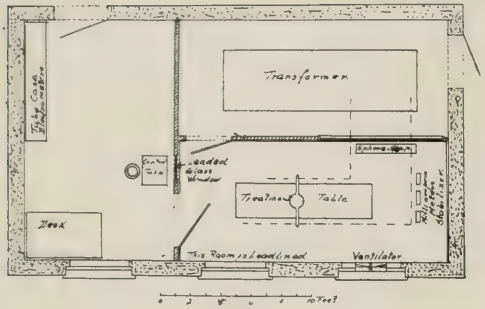


Fig. 1.

diated through two fields or ports of entry. This is sufficient for the greater number of cases. It is only exceptionally that we must use more than two fields.

Who should provide the transformer? This depends entirely on circumstances. The hospital may do so, or the radiologist may incur the expense of installation. The remuneration for these arrangements will be discussed in another paragraph.

The supervision and conduct of a radiation therapy department must be entrusted to a physician. The latter must possess a thorough clinical training and he must understand the principles of physics. The clinical training is absolutely necessary, for the success of the treatment depends on the clinical interpretation by the physician. He must be a surgeon possessing a complete knowledge of the pathology, the metabolism and the clinical aspects of the disease. He must master the physical laws of radiation. At least he should be able to measure intensities, determine their percentual values, interpret graphs of absorption and calculate the radiation intensities for each individual case coming for treatment. In short he should possess a knowledge of physics which enables him to apply the researches of the physicists to the technique of radiation therapy.

He also must know the transformer and the accessories in order to keep them in the best order and running condition. Only then may expensive repairs be avoided, the output of transformer and tubes be kept at its best, and progress conform to the rapid advances in his science. A man thus prepared will rank as a leader in his chosen specialty and the clinical results will be of a correspondingly high order.

Being occupied with so many diversified problems as the clinical examination, the treatment and follow-up system, the pathologic and biological aspects and the physics and technique of radiation therapy, the director of the radiation therapy department must have a properly trained technician. He may best be chosen from the nursing profession, a male nurse being preferable. The latter can arrange the patient on the table, insert retention catheters into the bladder in pelvic cases and attend to the many demands made by the patient during the prolonged treatment. He must have some knowledge of anatomy, and should observe the conditions of pulse, respiration and temperature. Trained properly and possessed of an unimpeachable fidelity to his duties, he will carry out the treatment faithfully as directed by his chief. His training may be given by the medical director. If properly trained and instructed the technician will be an indispensable and valuable part of the department.

Large Clinics Should Have Physicist

Progress in radiation therapy depends on the correlation of the science of physics to medicine. In large clinics where the medical examinations and biological researches consume all the time of the medical director it is advisable to attach a physicist to the clinic. He must assume the researches in physics, determine the intensities of x-rays for all the variable factors and keep tubes and transformers in the highest state of efficiency. It is evident that his researches must be submitted to the medical director to determine their value in the clinical application of the rays. Such work entails further expense for measuring instruments, as electroscopes, electrometers, waterphantoms and photometers.

The salary of the physicist and the expenses for the laboratory of physics could be met by the establishment of a teaching institution for the instruction of physicians, physicists, and technicians in the physics and therapy of x-rays and radium. The physicist could also be engaged by the smaller clinics or hospitals where he would standardize the apparatus and determine all the factors necessary for a correct radiation technique.

Having discussed the general aspects of radiation therapy, the arrangement of the treatment room, and the personnel, we finally may discuss the relation of the hospital to the department. Various solutions of this problem offer themselves.

The medical director may install at his expense the transformer and accessories, pay the repairs and the salaries for help. The hospital in its turn will agree to refer all the patients needing radiation treatment to this department. The diagnostic department, of course, must limit its work entirely to that of examination by the x-ray. The hospital also furnishes the electric power, the

linen, the cleaning and repair of the room and the furniture, such as examining tables, carts and chairs. The physician remunerates the hospital by a proper rent which is the only revenue the hospital receives. A better plan would be to have the hospital participate in the profits by a stipulated percentage it is to receive from the income of the department. If the physician pays for the installation and upkeep and collection of the fees, a fair percentage would be from 10 to 20 per cent. The hospital in addition also receives the income from the hospital services rendered the patient.

When Hospital Owns Equipment

In the second plan the hospital would assume all the expense of installation, upkeep and running of the department, including the salary of the technician, the expense of bookkeeping and the collection of fees. It would engage a properly qualified medical director who should be guaranteed a definite monthly salary and a participation in the net profits. It must then be assumed that this director visits the hospital daily, examines the patients referred to the department for treatment and leaves written instructions as to the proper methods of treatment. The technician, of course, must be thoroughly familiar with the technique and be able to carry out the treatment according to the written orders.

The director will have to engage in some specialty of medicine. In some cases the application of radium is preferable to that of x-rays, and in many cases of deep-seated carcinomata radium must be used in combination with x-rays. He might give these treatments on his own account and is thus insured of an independent income. The supervision of the x-ray treatment department under these circumstances offers a happy solution of the entire problem.

In small institutions the diagnostic x-ray work may be performed in the forenoon and the treatments given in the afternoon or vice versa. It is understood that equipment designed solely for diagnosis cannot be used for the treatment of carcinomata. The x-rays obtained from the 80 to 100 K. v. transformers are so soft and possess such a low power of penetration that it is practically criminal to use such transformers for the treatment of deep-seated and massive cancers. The patient is not benefited thereby, but on the contrary the tumor is stimulated to increased and more rapid proliferation, and hence rendered worse.

Department Budget

The budget of a modern department of radiation therapy should include the sinking fund, the repairs, and the salaries.

The expense of installation varies depending on the kind of transformer chosen, the number of tubes necessary, the accessories, etc. The average expense will be from $8,000 to $10,000. If the apparatus is given a life duration of five years with a yearly capacity of four hundred patients then the sinking fund would be $2,000 a year. If six hours of actual running time are consumed daily and the life of a tube is ninety hours (more nearly sixty hours) then the repair for tubes at $140 each amount for 300 working days to $2,800 yearly. The salary of the technician is $1,800. Incidentals for repairs on transformer, measuring instruments may be assumed to be $1,000. If 400 patients are treated yearly and 200 of these pay an average of $100 each, then the gross income would be $20,000.

Hence:

Sinking fund	$2,000.00	Income	$20,000.00
Tube repair	2,800.00		
Salary	1,800.00		
Incidentals	1,000,00		$20,000.00
	$7,600,00		7,600,00
			$12,400.00

The hospital receives $2,480 or 20 per cent of the net profits or the superintendent receives $4,000 or 20 per cent of the gross income.

Conclusions

1. Hospitalization of patients to be treated with high voltage x-rays for large and deep-seated carcinomata is necessary on account of the severe reactions observed after such treatment.

2. It follows that hospitals should provide for radiation therapy departments. Thereby the results of the treatment of malignant neoplasms in these institutions will be improved.

3. The requirements of such a department, i. e., installation, organization and administration have been described. The approximate income for each of the two plans of installation have been given.

You may be inconvenienced by the loss of your horse or your automobile if you have left the doors open to thieves, but there is always a chance you can recover your stolen property; however, when for lack of sanatorium facilities or proper treatment a person dies of tuberculosis, he is gone, and no attempt of anti-tuberculosis work can bring him back. You might be justified in taking chances on leaving your stable open, but failure to provide sanatorium facilities is an inexcusable neglect.—*Bulletin of the Ohio Public Health Association.*

A true man never frets about his place in the world, but just slides into it by the gravitation of his nature, and swings there as easily as a star.—E. H. Chapin.

MENTAL HYGIENE IN 1922

By FRANKWOOD E. WILLIAMS, M.D., Medical Director, The National Committee for Mental Hygiene, New York.*

THERE can be little question as to the outstanding event in the field of mental hygiene during the year 1922. Unquestionably it was the adoption in Cincinnati of a comprehensive five-year mental hygiene program. Millions of dollars are spent annually by social agencies in cities of the country in activities that are almost wholly ameliorative. It is an astounding fact; not astounding that these agencies should depend so much, but astounding that they should need to spend so much, for no one acquainted with the facts questions the need.

In a certain city—not the largest in the country—there are over 300 social agencies. One hundred and twenty-four of these raise the funds for their budgets in a joint effort similar to the Community Chest plan. These 124 agencies, less than half of the agencies in the city, have required for their budgets this year over $3,000,000. It was not until November that this amount after a great effort was finally raised. It is now another year and $3,000,000 will be needed. The more progressive agencies in this city will claim that their programs are socially constructive; and in a measure it is true that they are. But all that will be spent of this $3,000,000 on efforts that are not purely ameliorative will be but a drop in a bucket—probably a drop in an ocean, for $3,000,000 make a pretty big bucket.

Cincinnati's Five-Year Plan

For a period of five years, Cincinnati is to try a new plan in handling its social problems. A survey completed early in the year showed how closely interwoven are problems of social maladaption and mental hygiene[1]. This had, of course, been known before, but data on such a large scale have probably never before been gathered. The survey which was under the direction of Dr. V. V. Anderson included, aside from the study of facilities of certain social agencies and institutions, a careful examination of the "run-of-the-mine" of the cases coming in contact with the Ohio Humane Society, the Associated Charities, the Bureau of Catholic Charities, fifty dependent families of the United Jewish Social Agencies, the "run-of-the-mine" of the Juvenile Court, the Opportunity Farms for Boys and Girls, Hamilton County Jail, city and county infirmaries, the Home for the Friendless, the Catherine Booth Home, the Children's Home, the General Protestant Orphanage, boarding homes for children, and finally, over 4,000 school children. In addition, a study was made of the careers of 322 feeble-minded young adults in Cincinnati, 201 of whom had formerly been pupils in the special classes for the mentally defective maintained by the city and 121 of whom had been classified as mentally defective by the Vocation Bureau during 1917-1919.

One might point out in passing that the data gathered in this latter study confirmed the view that has been growing of recent years that the feeble-minded are not necessarily potentially delinquent, but that many of them are capable of living happy and useful lives in the community. It was found that approximately half of those studied—an unselected group practically unsupervised—were gainfully employed in industry and were providing no serious social problems. Neither were these individuals limited to odd jobs or simple day labor. There were eleven salesmen or saleswomen, eight machinists, six construction workers (building trades), five printers and apprentices, sixty factory workers, twelve messengers and bell boys, eleven doing housework for others, etc. Approximately half of those in industry were earning wages of $15 a week or more. The report states, "We found that those individuals not handicapped by personality difficulties and character defects received much higher wages than those so handicapped. We found, also, that those who were out in industry were far less likely to be handicapped by character defects and personality difficulties than those who were unemployed. Approximately half of those who were out in industry have remained in their present positions for longer than a year. We found quite a large group who had remained in their present jobs for two and three years. Here, as elsewhere, we found that the battle was in favor of those who were not handicapped by psychopathic conditions and personality difficulties[2]."

So evident was it from this study of social problems in Cincinnati that the handling of many of these problems was mere fumbling unless the mental aspect was taken into consideration—as Dr. E. E. Southard had pointed out several years ago in a review of Mary E. Richmond's *Social Diagnosis*—that the workers of Cincinnati were convinced that some means must be found of attacking these problems on that basis. At the request of the Mental Hygiene Council of the Federation of Health a five-year mental hygiene program for the city was prepared. This program unites about a central psychiatric clinic the various social agencies, the schools, the courts, the correctional institutions and various faculties of the University of Cincinnati. The plan was

*Dr. Williams' annual review article arrived too late for publication in the January issue.

[1]Anderson, V. V.: The Mental Hygiene Council of the Public Health Federation, 1922, p. 131, a report of the Mental Hygiene Survey of Cincinnati conducted by the National Committee for Mental Hygiene.

[2]Potter, Howard W.: Personality in the Mental Defective with a Method for its Evaluation. Mental Hygiene 6:487-97, July, 1922.

adopted and early in November the Community Chest board appropriated $30,000 for the first year of work.

Cincinnati thus becomes the first city in the country to attack aggressively the source of many of its difficulties, and during the next five years the attention of workers throughout the country will be directed toward this social experiment in Cincinnati. Too much must not be expected, for obviously a clinic the size made possible by the budget allowed cannot manage all the problems of Cincinnati. It is a generous budget for a beginning but it is but a drop in a great body of murky solution and a miracle of clarification cannot be expected. But it is a step in the right direction and sufficient good should come out of it to warrant a gradual increase in facilities until the size of the tool will be commensurate with the size of the job.

This step in Cincinnati means that we have come a long way. Organized work in mental hygiene did not begin until 1912 when the National Committee for Mental Hygiene, which had been formed in 1909, began its work. The original program of the National Committee for Mental Hygiene was a modest one—to help raise the standard of care and treatment for those suffering from mental disease. This item still remains one of the major items in the program of the National Committee, although that program has been extended year by year as the logic of the situation has demanded.

In tracing out the thread of mental maladjustment, as it leads back from the hospital into the community, psychiatrists and psychiatric social workers have found themselves facing problems in delinquency, in education, in the home, the social agency, and the like. Each step has led to the next step, so that there has been a gradual unfolding and a mental hygiene program, not in the terms of any one organization but in social thought, is coming to be closely identified with the large questions of human behavior. We are approaching a study of man as man—a study that has never been made. Since the time men became sufficiently numerous on the earth to make it necessary for them to take cognizance of one another, we have been setting up arbitrary standards by which to judge him; we have erected codes and laws and customs by which to measure and coerce him; we have poured out pity and "love" upon him and also hate and scorn; we have made him lovely toys, such as aeroplanes and phonographs and tried to make him happy, and when he was not happy we have tried to "save" him from something and for something—we have done all these things and more, and yet never have we seriously on any proper scale made an attempt to learn really what he is and to understand him for what he is, his possibilities for what they are, his own desires and interests be they what they may. We are approaching nearer to the time when arbitrary standards, built up without knowledge but as the result of empirical judgments, will be put aside for a time, and man will study man for what he is in the same way as he now studies other less important objects.

World Interest in Mental Hygiene

Interest in this matter is not, of course, confined to this country. It is not a matter that concerns a single organization or a single profession or a group in a profession, but a matter that must needs interest and concern men everywhere. There are many straws that show the way in which the wind is blowing. One of them is the crystallization of interest that produces such organizations as mental hygiene societies composed as they are of physicians, psychologists, educators, sociologists, economists and social workers. There are now national mental hygiene organizations in England, Canada, France, Belgium and South Africa. One is being organized in Australia and interest has been shown in Italy, Germany and Czechoslovakia. At the meeting in November of the Latin American Congress at Havana, a Latin American Committee for Mental Hygiene was formed on the motion of Dr. G. Reidel, director general of the State Government Hospital for the Insane, Rio de Janeiro. The British National Council for Mental Hygiene was formed in May with Sir Courtault Thomson as its first chairman. An international Congress of Mental Hygiene, to be held in this country, is planned for 1924.

Other straws are the development of courses in mental hygiene and human behavior in training schools for social work; special courses that are offered in such schools as the New School for Social Research in New York; extension courses, largely attended, at Boston University and Brown University; the establishment by the 1922 legislature of Massachusetts of a Division of Mental Hygiene in the State Department for Mental Diseases; the session devoted to mental hygiene at the meeting of the National Education Association in July, and of the sessions in the Education Division of the British Association; the increased attention being given to the subject at meetings of national medical and sociological associations; the increasing interest of public health officials[3-4].

Two other events of the year should not go un-

[3]Kelley, E. R.: Two Twilight Zones in Health Administration. American Journal of Public Health, 12:563-67, July, 1922.

[4]Emerson, Charles P.: The Next Step in the Mental Hygiene Movement, Mental Hygiene, 6:257-62, April, 1922.

recorded—the organization of the traveling psychiatric clinics for juvenile courts[5], and the establishment of a habit clinic for children in Boston[6]. Two traveling clinics have been organized by the National Committee for Mental Hygiene during the year, the first of which after a period of several months in the juvenile court of St. Louis is about to move to a second city—Norfolk, Va.—the city of St. Louis having arranged to take over and carry on the work of the clinic; the second clinic is at the present time working in the juvenile court at Dallas, Texas. At the completion of its work it will move to a third city not yet selected.

Campbell[7], Richards[8], Glueck[9], Kenworthy[10], Blumgart[11], and others have been pointing out for some time the relation that exists between the early faulty habits of children and later difficulties in adjustment. That data might be gathered in regard to the home environments under which children were forming these habits, the Massachusetts Society for Mental Hygiene early in the year made a survey of homes in a representative metropolitan district. A portion of the data gathered will be found in an article, little short of amazing, "The Child and the Home," by Dr. Marianna Taylor, in the October, 1922, *Mental Hygiene*. These data and the data that have been piling up from the various psychiatric out-patient departments, psychopathic hospitals and clinics, have led to the formation in Boston, under the direction of Dr. Douglas A. Thom, formerly chief of the out-patient department of the Boston Psychiatric Hospital, of a clinic where children who have developed faulty mental habits can be studied and the habits corrected. The work of this clinic, like the work in Cincinnati, will be followed closely by all those interested in children and in mental hygiene.

Significant Books of the Year

A report of the year should not close without mention of certain significant books that have been published. There are several of these and for the reason that each deals with a different aspect of the subject they cannot well be compared and arranged in an order of importance. James Harvey Robinson's *The Mind in the Making* is to be read; Paton's *Signs of Sanity* should have thoughtful consideration; Mary E. Richmond's *What is Social Case Work?* brings a mental hygiene point of view to social work; Myerson's *The Foundation of Personality* has an important place; May's *Mental Disease as a Public Health Problem* brings together in one book facts that previously have been scattered and difficult to assemble.

But one reserves chief comment for *The New Psychology and the Teacher* (Seltzer) by Dr. H. Crichton Miller and *The Kingdom of Evils; Psychiatric Social Work Presented in One Hundred Case Histories, together with a Classification of Social Divisions of Evil* (Macmillan) by the late Dr. E. E. Southard, director of the Boston Psychopathic Hospital, and Miss Mary C. Jarrett, formerly chief of social service at that hospital. The manuscript for this book was practically finished at the time of Dr. Southard's death. As its title indicates the authors have told here in a simple narrative way the essential facts in the life stories of one hundred unfortunate individuals who, because of disease, ignorance, bad habits and vices, legal entanglements, or poverty, came to the Psychopathic Hospital. They tell of what was done and of the result, claiming success where there was success and admitting with equal frankness failure when it occurred. Southard's interest in this book was very great, greater, perhaps, than in anything else he ever wrote, and the year is enriched by its publication.

Dr. Miller brings to the writing of his book his experience as the director of an educational clinic in London. His point of view is that of psychoanalysis—in the broader sense—and it gives as no other single book we know, an excellent background for the study and understanding of children. The book is equally suitable for either parents or teachers. It might well be on the required reading list of all normal schools and teachers' training courses.

[5]Williams, Frankwood E.: Mental Hygiene in 1921, The Modern Hospital, 18:69-71, January, 1922.

[6]Thom, Douglas A.: Habit Clinics for Children of the Pre-school Age. Mental Hygiene, 6:163-70, July, 1922.

[7]Campbell, C. Macfie: Experiences of the Child: how they affect character and behavior. Mental Hygiene v. 4, 312-19, April, 1920.

Campbell, C. Macfie: Nervous Children and Their Training, Mental Hygiene, v. 3, 16-23, January, 1919.

[8]Richards, Esther Loring: The Role of Situation in Psychopathological Conditions. Mental Hygiene, v. 5, 449-67, July, 1921.

Richards, Esther Loring: Some Adaptative Difficulties Found in School Children. Mental Hygiene, v. 4, 331-63, April, 1920

[9]Glueck, Bernard: Psychiatric Aims in the Field of Criminology. Mental Hygiene, v. 2, 546-56, October, 1918.

[10]Kenworthy, Marion E.: Extra-Medical Service in the Management of Misconduct Problems in Children. Mental Hygiene, v. 5, 724-35, October, 1921.

[11]Blumgart, Leonard: Observations on Maladjusted Children. Mental Hygiene, v. 5, 327-41, April, 1921.

NEW COURSE IN PHYSIOTHERAPY

A second course in physiotherapy will be given at Walter Reed General Hospital, Washington, D. C., beginning February 27 and extending over a period of four months, it is announced. It is open to women who have had at least a two-year training in an approved school of physical education and is in charge of Major James B. Montgomery, director of physiotherapy.

Quarters, rations and laundering of uniforms are provided by the hospital and a salary of $15 a month is paid students. No tuition fees are charge. The course will consist of lectures, recitations, and practical work in the clinic. Among the subjects studied are the following: anatomy and physiology, bandaging, electrotherapy, hydrotherapy, remedial and therapeutic exercise, massage and thermotherapy.

ROYAL VICTORIA HOSPITAL'S METABOLISM SERVICE

By E. H. MASON, M.D., and H. E. WEBSTER, Superintendent, Royal Victoria Hospital, Montreal, Canada.

THE metabolism service of the Royal Victoria Hospital was organized in 1917 and housed in a remodeled separate building previously used as an isolation ward. This building is connected to the hospital by a short covered corridor at the central part of the main building, thereby making the ward convenient to all parts of the hospital.

The general appearance and floor space is well shown in the accompanying photographs. In detail the total floor space is divided as follows:

Through the center of the building there is a main corridor with rooms opening upon both sides. At the back is the laboratory. The respiratory laboratory, a part of the metabolism service, is located in another part of the hospital, at a point convenient for the transfer of bed patients.

The division is as follows:

1 office.
3 private rooms (1 patient per room).
4 public rooms (2 patients per room).
1 kitchen.
1 dispensary and instruction room.
2 bath rooms.
1 scale room.
1 linen room.
1 laboratory.
1 stock room.

The kitchen is twice the size of the bedrooms. The laboratory extends off to one side from the end of the ward, opening into the main corridor. Across from it is the stock room. The dispensary is the size of a bedroom and in addition to its use as an outdoor diabetic clinic, it is employed four mornings each week for instruction.

The personnel working on the service consists of: one doctor, full time, in charge of the service; one doctor half time, in charge of diabetic instruction; one resident house officer, full time; two girl technicians; and one laboratory orderly.

The day nursing staff consists of one head nurse and three nurses in training. On the night staff are one nurse in training and a ward maid.

The metabolism service at Royal Victoria Hospital is housed in the small ward in the foreground, formerly used for isolation purposes. It is connected to the hospital by a short covered corridor.

The total personnel consists of twelve workers, all except one being full time. This makes more than one per patient, the maximum number of patients that can be accommodated being eleven.

The equipment installed outside of the regular hospital equipment is as follows:

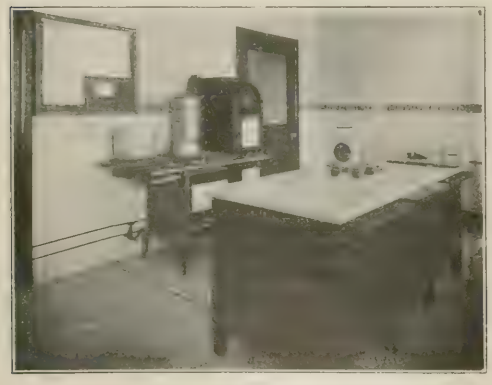
Kitchen.
2 Chatillon food scales No. 126½, 500 grams.
1 steamer for vegetables.
1 Torsion balance.
Individual dishes.
Granite cc. measuring cups.
Ward.
1 Scale, (height and weight.)
1 typewriter.
1 telephone.
1 ophthalmoscope.
1 blackboard (dispensary)

Two views of the laboratory (left and right) and a corner of the dispensary and room for instruction (center).

Laboratory.
1 water still.
1 electric hot air oven.
1 Kjeldahl digesting stand.
1 Kjeldahl distilling stand.
1 steam water bath.
1 set of six electric plates.
1 ice box.
1 autoclave.
1 centrifuge.
1 barometer.
1 microscope.
2 Dubocq colorimeters.
1 fine balance.
1 balance.
2 vacuum pumps.
2 Van Slyke CO_2 apparatus.
Usual glassware, porcelain ware, stands, tripods, etc.
Basal Metabolism.
2 sets metabolism apparatus.
1 Tisot gasometer.
2 gas analysis apparatus.
1 barometer.

Type of Work Undertaken.

To date, the main function of the metabolism service has been to handle all cases of diabetes mellitus admitted to the hospital. In addition extensive studies have been made on a large series of nephritic patients, and at times other problems have been investigated, such as the fasting treatment of epilepsy and special dietetic treatment in various types of hyperthyroidism. Further, an interesting series of obesity cases have been handled and chemical problems in many isolated diseases have been studied. The laboratory in addition to handling all the work from its own ward does all the blood chemical determinations for the other wards of the hospital, both private and public.



The metabolism service kitchen.

The respiration laboratory completes all the basal metabolism determinations for the whole hospital, the thyroid work being done in close combination with a thyroid group which has been functioning for the past year.

The metabolism service uses several forms which are peculiar to its department, being as follows:

On ward:
Large laboratory record sheet.
Daily diet form.
Kitchen sheet.
Food value sheets (for instructions).

In laboratory.
Daily urinalysis sheet.
Nephritic test meal report.
Urea and chloride excretion report.

In respiration laboratory.
Test sheets (2).
Basal metabolism report.

In Dispensary.
Case record.
Weekly report sheet. (Entered upon main record and then destroyed).

Instruction of Patients Emphasized

A special effort is made with all diabetic patients to teach them so that upon their discharge they are able to figure diets upon ordered food values, examine their own urine for sugar and the acetone bodies, and prepare weighed diets. Also some knowledge of their disease is given to them so that they will appreciate the importance of living upon a weighed diet. In our experience diabetic patients do well largely in proportion to the thoroughness of their education. Upon discharge the hospital provides them with the following equipment for which they pay.

1 Chatillon food scale No. 126½, 500 grams.
1 granite cc., measuring cup.
6 test tubes.
Fehlings solution.
5 per cent. ferric chloride solution.

The organization as previously outlined has been found to work very satisfactorily. Our staff is busy all of the time and will have to be enlarged if the department expands. The main fault in the floor space is that the laboratory is not large enough for the work undertaken.

CHANGING CONDITIONS IN THE HOSPITALS OF GERMANY AND AUSTRIA

By PROF. J. GROBER, M.D., University of Jena, Germany.

THE present status of hospital work in Germany is the result of conditions rising out of the war. The main determining influences are the condition of state finances, the fierce struggle for existence on the part of all classes of society, and the revolutionary changes in the social stratification of the people. The changes that have occurred have, indeed, been exceedingly marked, and only the future can decide the question of whether or not real progress has been made. To the observer in the present, at least, the indications of progress are slight.

For various reasons the conditions existing in Germany today are replete with interest for other nations. Before the war the hospitals of Germany, in the opinion of every one, were in most excellent condition. It is therefore a matter of great interest to learn how the circumstances of war and its consequences have influenced such a highly organized institutional system. On the other hand, many other countries today are suffering under similar, if not equally difficult, financial and economic conditions, and also are obliged to practice much the same economy in all directions, as we Germans, cut off from the whole world and from sources of food supply and raw materials, have been compelled to practice since the beginning of the war.

Can Learn Economics from Germany

A number of nations have found it advisable to send their representatives to Germany to study German methods of economical hospital management, and I am convinced that their sojourn in our midst was not without profit. Conditions growing out of the conduct of the war itself brought about many changes in the management of German hospitals, from which many new experiences were derived. The whole country resembled a beleaguered fortress. There was an almost unprecedented lack of raw materials, foodstuffs and man power. As time went on, our isolation from the rest of the world became more and more complete. Naturally, the army in the field needed most of the available supply of food and raw material. The home population was obliged to go hungry, as it did not wish to leave its fighters in the lurch. The food blockade established by the enemy forced Germany to deprive even its sick of the needed rations. The number of those who, on this account, perished or were injured in health will, of course, never be ascertained, but the figure would run high. They, too, are to be regarded as the victims of the hostile forces just as much as those who stood in the battle line.

During the war, the number of patients being cared for in Germany was very much increased, owing to the fact that many soldiers, wounded or sick from field service were sent back home. For this reason, it became necessary to transform into hospitals, buildings intended for other purposes. The same thing occurred in the occupied territory. Under these conditions, many physicians and hospital officials learned how, under difficult circumstances, hospitals can be constructed from buildings that were supposed to serve an entirely different purpose.

Schools Transformed Into Hospitals

School buildings were found to be especially well adapted for transformation into hospitals, as the classrooms were usually located on either side of corridors and were well lighted. The greatest difficulty about using schools for this purpose was the installation of water, steam, gas and electricity. Provision had also to be made for the preparation and serving of meals. It was seldom that schools were found to be equipped with these things. It was our experience that, while it was possible to utilize school rooms for kitchens and laundries, disinfection and operating rooms, it was distinctly better to erect new detached barracks for these purposes. Besides schools, we learned to use for hospital purposes court houses, administration buildings, city halls and cloisters. The perplexities and inconveniences were much the same in each case as those found in the schools. Draining, ventilation and toilet facilities

were usually very inadequate and necessitated a complicated organization, which was often very difficult to establish.

During the war, the supplying of food for patients in the hospitals at home was an especially serious problem. From the quantitative side, the greatest possible number of calories that it was possible to obtain was still inadequate, while genuine food of good quality was seldom to be had. From the standpoint of the special needs of hospital diet, it was particularly unfortunate that there was a grievous lack of meat, fat, milk, eggs, fresh vegetables and carbohydrate-containing foods, such as farina, hulled barley and noodles. It was only with the greatest difficulty that sugar could be procured. There were very few substitutes, and it may be said that it was due more to the enthusiasm of the patients, born of a lofty national pride, and their willingness to go hungry for the sake of victory that it was possible to sustain them at all in the hospitals; certain slight advances that were made in the methods of feeding patients played, by comparison, a very insignificant part. From the scientific standpoint of nutrition in general—for we are purposely avoiding every other consideration—it is extremely interesting to observe what a whole nation was able to endure and accomplish, during a period of four years, with its sick and its well, in spite of the undernutrition brought about by the food blockade imposed by the enemy; in fact, we might perhaps better speak of a famine condition.

The many physicians who, during the war, served in hospitals, both military and civil, were able to accommodate themselves to the new tasks that the war imposed, and it may doubtless be said that such service has contributed—since the war—to the general interest in hospital work and management.

Austrian Hospitals Suffer More

The condition of the hospitals in Austria during the war was not essentially different from that of the hospitals of Germany, as just described. However, the difficulties, owing to the fact that the people were not so well educated and their hospitals less developed than in Germany, were greater. Particularly during the last two years of the war, Austria, as well as Bulgaria and Turkey, experienced an exceedingly painful lack of medicines and bandages material.

The ascending curve that marked the splendid progress of German hospitals during the four decades preceding the war was suddenly broken by the events and sequels of the great struggle. During the war, very few new hospital buildings were erected in either Germany or Austria. To be sure, building activities in this field cannot be said to have ever ceased entirely. Even during the war and within sound of the enemy's cannon, a large modern fortress hospital was erected and equipped in the fortress of Metz, at that time still a part of German territory. This hospital came into use before the war closed. There also were a few other government and municipal hospitals completed. After the war, building activity was still further reduced. To be sure in certain university towns, institutions that had been planned before the war or through the hygienic needs of the time were necessary for clinical purposes were erected; for instance, the Medizinische Klinik in Heidelberg, which was completed in 1921, and the Clinic for Skin and Venereal Diseases in Jena, the building of which was postponed and almost given up on account of the ever-increasing cost of labor and material. In the main, building operations in Germany and Austria were confined to the modification of old buildings and the erection of small additions for special purposes.

Find Castles Make Poor Hospitals

Immediately after the revolution, in many parts of Germany with a purely socialistic government, the castles that had been wrested from the nobles were selected to serve as hospitals and homes for convalescents. But the experiences of the war, to which I referred above, were repeated here with a vengeance, and the same conclusion was reached: It is impossible to make out of an old castle, without completely rebuilding it and without the expenditure of large sums of money, a hygienically useful institution for the care and treatment of patients. On account of lack of means to make the necessary changes, old castles proved to be ill-adapted for infirmaries or recreation resorts for children suffering from mild but prolonged affections. Wherever this has been tried, it has soon been given up. The result of the various trials can be expressed by the conclusion that it is much more feasible and cheaper to erect a new, simple structure for the purpose required than it is to try to remodel old buildings so that they will prove satisfactory. We had the same experience with the castles of princes in the occupied area.

As especially characteristic of the present conditions, I may refer to the situation in the city of L———, which is a popular bath resort. For a number of years the city had been collecting funds with which to erect an especially fine municipal hospital. Excellent plans had been drawn up and approved by the three most eminent hospital architects of Germany. During the war, it was decided to postpone definite action, for the time

being. After the close of the war, the continued depreciated condition of German money made it necessary to abandon the plan, and instead, an attempt was made to put the old municipal hospital, which for many years had been found inadequate for the purpose, into a somewhat usable condition by making certain modifications and additions and supplying the most needed equipment. A number of private residences in the vicinity were also purchased in order to secure more floor space. Many German cities were in the same position and are still. In Austria things are very much worse, for during the past two years even the necessary repairs on buildings have not been made, and the result is that many hospitals begin to look like ruins.

War Stopped Research and Progress

Through force of necessity we are compelled in Germany to practice the most rigid economy in all directions, including the field of hygiene, which results to the damage of public health. Consequently, the new buildings, together with the modifications in and additions to the old buildings, from the purely architectural standpoint have been reduced to the utmost simplicity, and it will be noted that many of the features of modern hospital construction, which, before the war, were regarded as imperative are conspicuously absent. The problem of nonconduction of sound, which, during the last few years before the war, was the subject of earnest study and investigation, and which, in the modern hospital construction before 1914, seemed almost solved, we have been obliged to lay on the shelf; nor are we longer able to install central warm water heating systems provided with electric regulatory mechanism, by means of which the air temperature of the sick rooms can be regulated. In fact, I know of some recent hospital buildings in which it has been necessary to return to ordinary stove heating.

Before the war, we were beginning to regard certain luxurious hospital fittings and equipment as a matter of course, so that now it seems like a big step backward when, for instance, the walls, instead of being covered with white glazed tile are merely whitewashed; when double windows have to be dispensed with; when, in place of fireproof stone staircases and hardwood floors, we find ordinary wooden staircases and common pine floors in the sick rooms, for linoleum and similar floor coverings have scarcely been thought of for some time.

Still more pronounced than the falling off in hospital construction proper has been the downward trend in respect to apparatus, machines and general equipment. I have already mentioned the difficulties in regard to heating. It is not only that the purchase and installation of a central heating system (I am not speaking of a warm water heating system) are beyond the means of the hospitals, but it is also impossible to procure the coal necessary to operate such systems. It also is very regrettable that the newer ventilation systems cannot be installed. Before the war, as the result of the rapid progress in hygienic and industrial technique, we had succeeded in inventing very satisfactory ventilation systems for hospitals. The advocates of mechanical ventilation had to face considerable opposition, but the technicians were able to show that it is possible, with a very slight expenditure of human energy and time, to carry out mechanical ventilation even in buildings in which bad odors are frequent and to supply them with fresh heated air (or cooled air, as the case may be) in a perfectly hygienic manner. But today such ventilation systems are out of the question. Not only the initial cost of the ventilators but also the operating expenses are beyond our means at present. We have therefore been compelled to return to the old method of ventilating through doors and windows. The same conditions obtain as regards other technical equipment; in the kitchens and the laundries, in the storerooms and the disinfection plant; in this latter place too we have been obliged to give up what, before the war, we accepted as a matter of course, knowing that it was no more than was needed for the health and prompt recovery of our patients. The first cost and the operating expense of power-driven kitchen equipment place it beyond our reach at present. In spite of the high cost of labor, it is easier to get the hospital laundry washed by hand than it is to buy laundry machines and operate them.

Since, owing to present conditions, the erection of new buildings and the procuring of new equipment are out of the question, the attention of all persons interested in hospital work has been directed almost exclusively toward hospital management. That is partly due to the fact that the rich experience acquired during the war in hospital work demands practical application, and is partly because the present heavy operating expenses encourage retrenchment and economy wherever possible.

Food Prices in Many Cases Prohibitive

Foodstuffs in Germany have reached unheard-of prices. Very few persons can count with any certainty on having meat at their meals. Many are suffering from the manifestations of qualitative and quantitative undernutrition. A large number actually go hungry. Owing to the pe-

culiar conditions that exist, the distress weighs most heavily on the more cultured classes and persons of more advanced age. When the *rentier*, though in good health, feels compelled for financial reasons to reduce his calory intake, he voluntarily or involuntarily decreases the amount of calories utilized. When it is a question of supplying a proper diet for patients, it is more or less impossible to reduce the calory utilization. If a patient is endeavoring to recover from an infectious disease with loss of body tissue due to intoxication, we cannot expect to restore him to his normal condition unless we can supply him with adequate food. Diseases of the digestive tract or of the blood, as well as conditions characterized by general weakness, not to speak of those pathologic conditions in which the treatment is purely dietetic, require, from both the quantitative and qualitative side, a carefully selected diet. To procure the food required is, at the present time, a very difficult matter, because the prices are almost prohibitive for ordinary hospital management. Nevertheless, if we cannot secure just what we need, we endeavor to procure adequate substitutes.

Food Substitutes Widely Used

The exigencies of the present situation have made surrogates a special subject of study. We had made heretofore some progress in such study, but we have now gone much more deeply into the subject. However, from the hygienic standpoint, many of the substitutes are not entirely free from objections. Whereas formerly scarcely any objections could be raised to the use of good margarin in the hospital kitchen in place of butter, at present many bad and inferior grades are found on the market which it does not seem advisable to use. The same is true of many brands of canned goods which, high priced and of poor quality, are brought in from foreign countries and have caused much damage. The general scarcity of foodstuffs forces even the hospital kitchens to use inferior qualities of food that would formerly have been rejected. In the selection of a diet more consideration is given to the fact that it is filling and produces a certain sense of satiety rather than to the fact that it contains the requisite number of calories in an easily digestible form.

Milk is scarce because the Treaty of Versailles required us to give up a large number of milch cows; also because foreign stock foods are lacking. Eggs, meat and wheat flour have reached such prices that the income of the hospitals is no longer adequate to purchase them. Before the war, we were well on the way toward making a special discipline of the dietetic treatment of diseases. In all large hospitals metabolism-testing laboratories and special diet kitchens were being established in aid of this discipline. Today such things can no longer be thought of.

Extreme Economy in Use of Medicines

In procuring of medicines for hospitals and of chemicals for laboratories similar financial difficulties are encountered. We are compelled to limit ourselves to a minimum in the use of medicines, and at times it is doubtless true that economy is carried to such extremes as to work an injury to the patients. It may well be admitted that, as a consequence of the achievements of the German chemical industry before the war, a certain overproduction and polypragmasy in the prescribing of drugs had taken place and that we might easily get along with fewer medicines. At present many patients are unable to pay for the medicines that are prescribed for them in hospitals as absolutely necessary, for in almost all hospitals it has become the practice to make a definite charge for board and room and an extra charge for all medicines and any special service. Medicines and other special needs of the patient are furnished for the most part at cost or at a slight advance above cost. If this plan is kept up, the clinical testing of the newer remedies is bound to suffer. We cannot complain of a dearth of new remedies being offered us, for the chemical and pharmaceutic industry is busy and is in a position to furnish funds for trials with its new remedies. Many articles are being written on new remedies, for the manufacturers place them at the disposal of certain physicians who express a willingness to try them and to publish their results. But the general testing and the criticism of clinicians are lacking, for, on account of the high cost of the remedies, very few are in a position to test them independently. It is to be feared that if this condition continues for any great length of time, the progress of pharmacology and of pharmaceutic and chemical science and production will be bound to suffer. To be sure, we can if necessary get along with comparatively few medicines, but if we do we miss the opportunity of improving our knowledge.

The high cost of medicines has brought it about that more attention than formerly is being paid to physiotherapy. Some of its modes of application are very simple and can be carried out at very slight expense. Many hospitals were already equipped with extensive apparatus for this purpose, which in the past had been used very little.

Since in this case the cost of installation has already been met and the equipment already may have paid for itself, the essential thing in connec-

tion with its use is to reduce the cost of operation to as low a figure as possible and to provide for repairs and new parts. For these reasons, almost everywhere a pronounced emphasis is being placed on physiotherapy. Owing to the continual increase in the cost of motor power and material, together with the sharp advances in the wage scale, the day is presumably not far distant when, in spite of everything, even this method of treatment will be beyond the means of most patients. That will be especially true if the use of complicated apparatus is insisted upon, the initial cost of which, together with the cost of repairs, necessitates the expenditure of fabulous sums. The simplest forms of physiotherapy, namely hydrotherapy and thermotherapy, will be retained the longest, not only for the individual patient but also for the inmates of the hospitals.

Social Revolution Affects Employment

Then there are the difficulties that arise in connection with the personnel. These difficulties are traceable to three distinct causes: the peculiar shifting process that has been going on the past few years among various classes of society; the enormous increase in wages; and the introduction of the eight-hour system of labor. The shifting of the social classes has proceeded so far that persons who formerly would not have thought of such a thing apply for menial positions in the hospitals as a means of earning a living. On the other hand, it is not uncommon to find persons serving in the higher capacities; for instance, as nurses, who are not fitted socially for the work they are performing.

The increase in the wages that must be paid the personnel of the hospitals has kept pace with the depreciation of the mark. The lower the nature of the employment in the hospital, the greater has been the increase, in general, in the wage scale. Employes of most of the hospitals in Germany and Austria are members of trade unions and are supporters of the social democratic party. It is to be noted that these organizations make a special endeavor to establish their own courses of instruction, in which their members may be trained for their line of work, and, after they have given their members the special training, they use their utmost efforts to prevent persons who have not received such training from serving in the lower positions of the hospital service, as waiters and waitresses, for example. On the other hand, there arises the danger that the nurses may come to be regarded with less respect and may finally be replaced by waiters and waitresses who have had less training. I would regard such an eventuality as a great loss to the German hospital system, in which the peculiar and almost unassailable position of the nurse has played a characteristic and prominent part.

Eight-hour Day Works Hardship

The third difficulty is the strict enforcement of the eight-hour day. As the result of the introduction of this system, we have been compelled to establish three shifts in the ordinary personnel, as permission to deduct from the total work day hours the hours of "readiness to serve" would not be accorded us. That the quality of the nursing and of the medical service necessarily suffers as the result of this three-fold shift in the personnel during the twenty-four hour period goes without saying.

Of late, the nurses are not to the same extent as formerly members of certain religious organizations. Organizations of nurses have sprung up that are actuated by purely utilitarian motives and are not affiliated in any way with any religious denomination. It must be admitted in general that the wages of the nurses so affiliated were small. The religious society derived a peculiar advantage from the labor output of its members by playing on the altruism of the better natured among them. To be sure, it is frequently the case that religious enthusiasm takes the place of true altruism, but the religious denominations have no compunctions about utilizing this motive as well. For this reason, it sometimes may be noted that the organizations of nurses that are not affiliated with any religious denomination demand a strict application of the eight-hour day, whereas the organizations that are so affiliated seemingly know nothing about the eight-hour system.

Professors' Salaries but 1/120 of Nurses'

With further reference to the personnel, it is noticeable that, as a result of the revolution, a spirit of unwillingness to adapt oneself to the needs of an organized compulsory service is everywhere manifest. Even among the employes who perform the more menial tasks in the hospitals there are so-called labor counselors, who frequently concern themselves with affairs that are entirely beyond their intellectual ken and their economic scope. The unusually high wages that such employes receive at present confirm in them the conviction that their services are indispensable and thus bring ever greater damage to the internal workings of the hospital. To furnish one illustration: there are today professors in the medical schools of Germany who receive as their annual salary only one-tenth the amount that a nurse receives per month. *Sapienti sat.*

Under such conditions, it is only natural that

at times hospital management palls on those who have to bear the responsibility. Only stern necessity forces us to continue to bear the burden. Unfortunately, the conditions as just described exert a depressing influence also on the intellectual life of the nation. To be sure, there is a proverb which says, *Plenus venter non studet libenter*, but an empty stomach is still less fond of study. If we consider, in addition, our worry about the future of our country, it will be seen that the inhibitory tendencies are doubly great. Our worries are vastly increased by the insufficient meat rations and the inadequate calory intake. If conditions do not improve in this respect, a falling off in the scientific output of German physicians will soon be noticeable.

Rates Advance Every Two or Three Weeks

The difficulties connected with office management are much the same as those mentioned in connection with the personnel performing the more menial duties. The time and energy of the medical director and also of the lay superintendent are often taken up almost solely with negotiations in regard to increases of salary, instead of being applied, as they should be, to the effecting of improvements in administration and management. It goes without saying that an endeavor has been made to practice economy in office management the same as in other directions, but, owing to the fact that the employes are members of organized unions, it is difficult to keep the salaries down, and it is equally difficult to discharge any of them. The reason is the same in both cases. Another burden is the enormous advance in the prices of all power-producing substances, such as coal, benzine, oil and gasoline, without which the modern hospital cannot operate. The constant upward trend of salaries necessitates a continual readjustment of the sources of income. Therefore, during the last few months, almost every two or three weeks, an advance in the schedule of prices that patients are required to pay has been published. The fact that patients can never form an accurate idea as to how much their stay in the hospital is going to cost them, together with the seemingly high tariff schedule as viewed in the absolute, reduces the number of admissions quite materially. The consequence is that most hospitals have many more unoccupied beds than formerly.

If it were not for the fact that many who claim sick benefits are quartered in the hospitals until their claims can be allowed, the number of patients would be even smaller than it is. It also is to the interest of the general practitioners to treat their patients themselves and not send them to the hospital. Owing to these conditions, there is then a very considerable lack of patients, which makes itself felt especially in the university institutes.

In regard to problems of academic instruction, the prospects are particularly bad, for it is self-evident that, when the number of patients is reduced, the opportunities for proper instruction in the practice of medicine are much diminished. Owing to present conditions, means for the purely scientific work of the hospitals, which no hospital can afford to neglect if it wishes to keep abreast of the times, are not forthcoming, and it is not impossible that the hospitals may, on this account, lapse into a decadent condition from which it will be difficult to recover. We have at present in Germany no adequate state funds that are available for the purchase of a minimum supply of material such as is needed for scientific experimental work. What the blockade and the war have not devoured is now being lost through the depreciation of the mark, and as things stand today, we see no prospect of improvement, nor do we see any way in which it might be possible for us to help ourselves.

Retrograde Movement is Probable

However, we have confidence to believe that there is enough sense of justice in the world to refuse to permit an industrious and capable nation, such as the German people was, and one that has accomplished so much in the field of medicine and hospital development, to perish from the earth.

I admit that it is a gloomy picture which I have been compelled to unroll. Under present conditions, no progress in hospital administration or management can be expected; in fact, a retrograde movement is more likely. We are making an honest endeavor to learn all there is to be learned from the misfortunes and the distress that have come upon us. We are trying to see to it that the hospitals of the country shall contribute all that they can toward the health and welfare of our people. In many places, efforts are being made to make some progress, even under the present adverse conditions, and to replace the old equipment with something better and, at the same time, cheaper. The reprint of the compendium, "Das deutsche Krankenhaus," and the various hospital journals published in Germany are evidence of this fact. If we are successful, we shall surely be entitled to raise aloft as our motto: *per aspera ad astra.*

Progress, man's distinctive mark alone,
Not God's, and not the beasts'; God is, they are;
Man partly is, and wholly hopes to be.
—Browning.

THE HOSPITAL A NUCLEUS FOR A MEDICAL CENTER

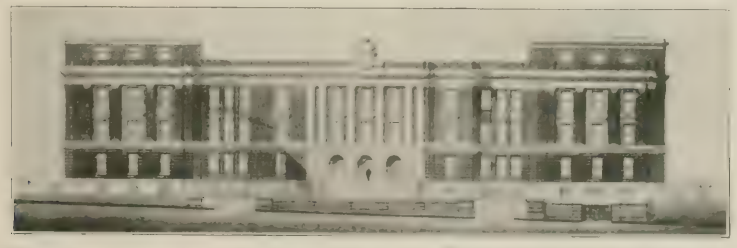
By LT. COL. PAUL C. HUTTON, U. S. M. C., Chief of Hospital Division, Office of the Surgeon General, U. S. A., Washington, D. C.

WHEN Congress appropriated $500,000 to build a new Army Medical School building at Walter Reed General Hospital, this act constituted the first step in the creation of a great medical center and the utilization of a large hospital as its nucleus. The plans in detail for this medical center have been worked out to completion and the surgeon general of the army expects to secure additional appropriations from time to time with which to add the various and multiple accessories which are essential to this unprecedented project.

The Army Medical School building now under construction. A twin building later will be erected, and the two connected by a structure which will constitute the first complete unit of the medical center.

The Walter Reed General Hospital first began to function in May, 1909, and at that time had a capacity of 89 beds. On January 1, 1917, this capacity had increased to 164 beds. When war was declared, the War Department began to expand this hospital and by June, 1918, a capacity of 1,235 beds was reported. By October of 1918, this capacity had increased to 2,645 beds. This rapid expansion was accomplished by types of construction ranging from temporary frame to semi-permanent tile, the war conditions being so urgent that the time factor prohibited permanent construction. Thus we see the transformation of a relatively small hospital to one of considerable magnitude with a capacity of 2,645 beds in a comparatively short period, and at the same time a metamorphosis which took on all the characteristics of a war-time hospital with extension of its facilities from the routine of peace-time operation to the highly technical specialties required by war conditions. The magnitude of the service rendered by this hospital may be partly understood when one reviews the records on file in the Office of the Surgeon General of the Army. During the calendar years 1918 and 1919, there were treated at this hospital 25,359 cases.

When the war came to an end, the War Department was prepared to contract this large hospital to a point compatible with the requirements of the authorized regular army, but the Veterans' Bureau desired to avail itself of its facilities and it, therefore, became necessary to maintain a capacity far in excess of strictly military needs. At present the Walter Reed General Hospital has a normal capacity of 1,500 beds with facilities for emergency expansion to 2,000 beds, and if one may judge from present indications, it appears unlikely that its capacity will fall below 1,000 for an indefinite period. We may, therefore, anticipate that the hospital nucleus of the great medical center will not be less than 1,000 beds. On the following page is an aeroplane view of Walter

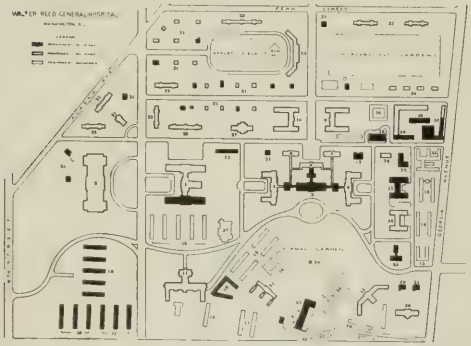


End view of the building shown above and of its twin, with the connecting structure. The completed building will be in the form of the letter "H"

Reed General Hospital as it is today.

The Army Medical School building, now in course of erection at Walter Reed General Hospital, represents two-fifths of the amount which will ultimately be required to complete the structure. The first photograph represents the building now three-fourths completed and also its twin for which the next appropriation is to be asked. When these two structures parallel each other, an additional appropriation of $250,000 will be necessary to connect the two, as illustrated. The acquisition of this completed project will constitute the first completed new component of the medical center, after which will follow the army medical library and later the army medical museum. The grouping of all of these allied activities will follow the outline shown below.

Airplane view of the Walter Reed General Hospital reservation. The three wards in the left center outlined by the dotted lines have been demolished to provide space for the Army Medical School building.



Block plan map of the army medical center as planned, including Walter Reed General Hospital.

1. Army Medical School.
2. Army Medical Museum and Library.
3. Administration building of hospital.
4. 224 bed ward addition.
5. 224 bed ward addition.
6. Mess hall addition.
7. Laboratory.
8. Library.
9. Tuberculosis wards.
10. Isolation wards.
11. Psychiatric ward.
12. Maternity ward.
13. Gate house and receiving building.
14. Wards.
15. Wards.
16. Ward for female patients.
17. Venereal wards.
18. Shops for occupational training
19. Eye, ear, nose and throat clinic.
20. Commanding officer's quarters.
21. Officers' quarters.
22. Apartment for officers.
23. Nurses' quarters.
24. Non-commissioned officers' quarters.
25. Barracks for medical detachment.
26. School for nurses.
27. Building for American Red Cross.
28. Warehouses.
29. Stables.
30. Garage.
31. Chapel.
32. Greenhouse.
33. Grand stand and gymnasium.
34. Band stand.
35. Guard house.
36. Post exchange.
37. Power plant.

From the foregoing one may quickly discern that a physician on duty at Walter Reed General Hospital or student officers undergoing a post-graduate course of instruction at the Army Medical School will have surrounding them professional opportunities which have rarely, if ever, been equaled. The student officers will have the benefit, not only of their own highly trained teaching staff, but of the hospital clinical staff, representing all the specialties on duty at the hospital. At the same time the wealth of pathological material available in the Army Medical Museum and the unsurpassed collection of medical volumes in the Army Medical Library will provide facilities which have hitherto never been enjoyed by members of the medical profession. The creation, then, of such a medical center with its hospital nucleus must lead ultimately to a medical supremacy which should place the United States in a position of leadership for the entire medical world.

The accompanying map of Walter Reed General Hospital outlines the various medical activities which will constitute the great medical center, as it will be when completed.

The following hospital men have been appointed as a committee of the American Hospital Association to cooperate with the government in the sale of surplus supplies left over from the World War: Dr. Winford H. Smith, director, Johns Hopkins Hospital, Baltimore, chairman; Dr. Thomas Howell, superintendent, New York Hospital, New York City; Dr. Joseph B. Howland, superintendent, Peter Bent Brigham Hospital, Boston.

HOSPITAL DEVELOPMENT IN HOLLAND

By J. L. C. WORTMAN, M.D., Superintendent, Tesselschade Hospital, Amsterdam, Holland.

WITH a great deal of pleasure I will undertake to tell something of hospital progress and its relation to other public health institutions in Holland. The reader of this paper will permit me to go back some years in the history of the hospital field, since the progress of the past year is not important enough to awaken interest.

Increased costs of building and maintenances have prevented the achievement of nearly all our plans for constructing new hospitals. Moreover, hospitals now in existence have had few improvements, especially the voluntary hospitals. Governmental as well as private affairs are at the present moment ruled by economic considerations. The hospitals have not escaped from this tendency. Even the building of a large hospital and medical school at the State University of Leyden, now in course of construction, has been delayed because of economic conditions. In both the other university towns, Utrecht and Groningen, hospital construction took place at an earlier date and under more favorable circumstances.

War Halted Hospital Construction

Holland generally is well provided with hospitals, but they are mostly of an old type, partially renovated and furnished with new equipment for medical treatment and research. Of the three largest towns, Amsterdam, Rotterdam and The Hague, only Amsterdam possesses new hospitals of any importance, namely, the Wilhelmina Municipal Hospital of 1500 beds and the Catholic Hospital of 600 beds. Even they were constructed in the last decade of the past century.

During the European War a new municipal hospital at Amsterdam was planned and approved by the town council, but lack of materials, especially those of a technical nature, prevented the execution of the plans. Instead of erecting a new building, an orphanage was completely reconstructed for hospital use and thus the need for greater hospital accommodation was satisfied. This hospital, called Tesselschade Ziekenhuis, is situated near the entrance to a large town park and is partially intended for advanced tuberculosis patients.

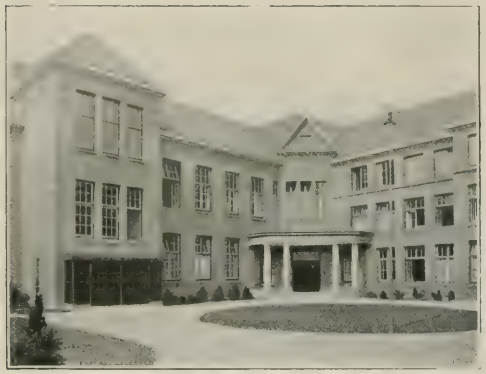
The project for a new medical school and hospital at the Municipal University of Amsterdam, replacing the old institution, the Binnengasthuis, failed because of the war. The same fate met the completely prepared hospital plans for 1,000 and more beds in the cities of The Hague and Rotterdam.

Picturesque Dordrecht Has New Hospital

Although the larger towns failed to enlarge their hospital accommodations, such was not the case at Dordrecht, the picturesque town situated on the Maas River. There the town council was plucky enough to carry out during the war the proposed hospital construction.

Because of this the stranger who visits hospitals in Holland is advised to go by steamer from the Maas station at Rotterdam upstream to Dordrecht, one of the most beautiful scenic trips in Holland. After visiting the municipal hospital of the miscellaneous corridor-pavilion type with accommodations for 200 patients, he can take fortune at the tide to get acquainted with a small private hospital of modern architecture. While the municipal hospital—and this is the rule throughout Holland—is used for the poor and the

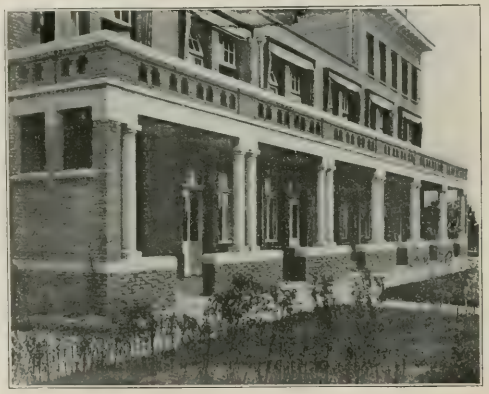
The Catholic Sanatorium, "Dekkerswald," near Nymegen, Holland.



Municipal hospital at Dordrecht which accommodates 200 patients.

lower classes, the private hospital is intended for the upper classes. Only those private hospitals, which are at the same time institutions of a religious character, take care of poor and middle class patients, in addition to the others.

The reader already has gathered from these lines that there are in Holland four universities with medical schools and hospitals. A fifth is partially achieved by the Reformed Protestants, and the Catholics are working for a sixth.



Private hospital at Dordrecht.

In addition to the academic and general hospitals mentioned, I must call to your attention a large number of special hospitals. In nearly every town of any importance, there are hospitals for children, and in the larger cities there are hospitals for diseases of the eye. In the country there are a sufficient number of hospitals for nervous and mental diseases, as well as an ever-increasing number of sanatoriums for tuberculosis. Two sanatoriums, housed in temporary buildings (war barracks), are the more recent products.

The fight against tuberculosis is carried on in an efficient manner, especially at Amsterdam. A central dispensary, in charge of a full-time physician, is charged with the arrangement of all social measures in connection with the patients. He places the patients in sanatoriums or hospitals, according to the seriousness of their sickness. Therefore he is constantly aware of the number of unoccupied beds in the tuberculosis department of the local hospitals and in the sanatoriums of the whole country. As a matter of course many other anti-tuberculosis measures are taken, but I forego the desire of dwelling on them longer and will pass on to hospital organization in Holland.

Nearly all hospitals have a medical superintendent and a matron, who is the chief of nursing and housekeeping but subordinate to the former. The superintendent is responsible for the management and the internal regulations of the house. His position in the municipal hospital is comparable to the managing directory of a factory. Even the physicians are subordinate to him, but are independent in regard to treatment of patients. This rule is possible, as all physicians in the municipal hospitals are officials, mainly half-time men. In the smaller and in private hospitals, the superintendent is obliged to treat all third-class patients; in larger institutions his medical duties are less.

An important part of the superintendent's and the matron's duties is the care of the nurses and the nursing school. In every hospital of fifty beds or more, nurses are trained, practically and theoretically. After three years of training, quite on the English and American plan, the pupils are admitted to an examination. If they pass they receive a diploma of trained nurse and many of them leave the hospital for private nursing.

In the municipal hospitals at Amsterdam and Rotterdam, the eight-hour day has been intro-

Clinic buildings for surgery and gynecology at the University of Utrecht.

duced for nurses, as well as for the rest of the staff. Consequently the number of staff members exceeds the number of patients; and the number of nurses amounts to half the number of patients. The duty of the nurses is limited to the patient and his immediate surroundings. Housekeeping

Tesselschade Hospital at Amsterdam faces the town park

of the ward is done by hand maids and charwomen. Finally a great many men and women are busy all day cleaning the house, for it is a Dutch hobby, you know, to scrub and polish until the last stone is glittering.

In contrast to American conditions, the outdoor department of hospitals in Holland has not much importance. Most of them have policlinics, which however are visited by only a limited number of patients, because a well-ordered system of house physicians and specialists are attached to sick funds, and they assist the sick of all circumstances, outside the hospitals.

A social service department is not essential because the hospitals do not offer any outside aid. This task is given over to other agencies in the large towns, namely, the municipal and private medical services. Particularly the municipal medical services are important public health institutions and are intended to take care of medical hygienic measures of all sorts by means of school hygiene, medical attendance and nursing to the poor, the care of sucklings, accidents on the street, transportation of sick to hospitals, etc.

City Medical Services Too Powerful

More and more the municipal medical services are charged with the work of placing and controlling patients recommended by house physicians for hospitalization. In this way these services are vested with too large an authority and they imperil the full use of our hospitals. Indeed this system has a tendency to reduce hospital provision. The peril of this tendency is that it does not provide for the hospitalization of operative cases, nor of infectious cases, including the venereal and tuberculous, but provides only for general medical cases. Recommendation for hospital attendance for general medical cases has partly a social and partly a scientific side, and is generally not well founded. There are many acute cases which require prudence in rendering a decision in regard to hospital attendance because of the danger of transportation of the patient. Thus we have had sad experiences in cases of pneumonia, serious hemoptysis and hematemesis, and also with patients on the verge of collapse or suffering from violent colics, brachycardial attacks, etc. Therefore we must balance the "pros" of hospital attendance against the "contras" of perils in transportation and the emotions of leaving home.

From a scientific and economic standpoint, beginning cases of serious disease should have the advantage of hospital treatment. The medical clinic occupies a prominent place in the recognition of incipient cases and also in the treatment of many chronic cases in order to restore physical balance. The restoration of power to work constitutes the economic value of the hospital; in contrast to this capacity, hospital treatment of the incurably sick is of a purely philanthropic nature.

Consequently, the question of hospitalization of general medical cases has many sides and needs immediate study. From the standpoint of hospital efficiency alone it is important enough for close examination. Anything that will add to efficiency must draw our attention, for that is the way to increase the value of our hospitals and to consolidate their dual function as social and economic institutes.

HELP TO PAY OFF INDEBTEDNESS

Citizens of Bangor, Maine, and others interested in hospital work are assisting in paying off the indebtedness of the Eastern Maine General Hospital at Bangor and in providing funds for the construction of a coal pocket, power plant and laundry. The amount needed for these various projects is $250,000 much of which already has been raised. With the proposed improvements and the cancellation of interest charges, the hospital hopes to effect a saving of from $12,000 to $15,000 annually.

Among the donors were Col. Simon J. Murphy of Whittier, Cal., who recently provided funds for the erection of the Murphy Memorial Hospital in that town, and "a friend," said to be a stranger in the city who sent a check for $75,000. Col. Murphy's gift was for $10,000; he was a former resident of Bangor. Half of the amount needed had been raised in early December.

He that has never known adversity—is but half acquainted with others, or with himself. Constant success shows us but one side of the world; for as it surrounds us with friends, who tell us only our merits, so it silences those enemies from whom only we can learn our defects.—Cotton.

The MODERN HOSPITAL

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THE STATE HOSPITAL

WITH this number THE MODERN HOSPITAL begins a plea for a new interest on the part of the medical and hospital fields and their educational organizations in the state hospital and colony for the mentally afflicted.

Thought has been given this subject for a long time and careful inquiries have been made to learn just what the situation in these institutions is. As Mr. Homer Folks, president of the National Conference on Social Work, aptly says in the article on "Bettering the Service of State Hospitals" on page 105: "Conditions in state hospitals following the war have resulted in general retardation of progress, if not an actual reversion to lower standards." Other students of the situation doubt if, on a general average, the condition of the insane and feeble-minded throughout the United States is better today than it was 100 years ago.

Whether this be true or not, the war has seriously disorganized these institutions and clamped the brake on the progress some states were making. They have not recovered their morale or working organizations and most of those hospitals, which have not actually fallen behind, are only marking time, and giving care little better than that rendered by the custodial institutions of another day.

The success that has attended the movement to elevate the standards of general hospitals throughout the country gives this magazine courage to believe that interest can be stimulated in the plight of the mentally sick and in the means which are available for their care and treatment.

The problem before us, while it is a hospital matter, nevertheless is very much different from that which confronted those who some years ago established minimum standards among general hospitals. The state hospital is isolated; it draws its support from the public treasury; it is subject to continuously changing policies, emanating from sources which have no or very little knowledge of its needs or work; it is enshrouded in the mysteries and superstitions that have always retarded constructive work among the so-called insane; it is hampered by the practice prevailing in almost all states, of considering it fair political spoils to be used to the advantage of the party or faction in power. It is more difficult to center public attention upon the state hospital than upon the local general hospital, which is located in the midst of things and is ever present as a suppliant for the charity and support of the people it serves.

But the state hospital situation may be approached from a different direction. Its delicacy and peculiarities are recognized and THE MODERN HOSPITAL will attempt to treat it with the consid-

eration that these factors impose. The campaign will not be one of exposure or muckraking. There will be no harsh criticism of men or organizations. Whatever is done will be done in the spirit of constructive helpfulness.

The campaign which starts this month will continue through a long period. The aim will be to enlist the cooperation and support of everyone engaged in state hospital administration or medical service. Its first stage will be devoted to a statement of the serious problems that confront every state hospital or colony, a statement of the conditions and situation as they are, with such suggestive, constructive material as may be available. The second stage will include a review of a few of the best hospitals, those most fully rounded out, and of a few others that are excelling in one or more directions. The third stage will include constructive thoughts and ideas from specialists and experts who may show the way to better things. The whole campaign has been designed as a healthy stimulant to all those who are engaged in the medical profession or in the administration of state or general hospitals.

THE MODERN HOSPITAL in this movement has only one purpose: to arouse interest in the institutions which have been erected for the care and treatment of those who are unfortunate through mental disease or deficiency. Better standards in these institutions are possible without the expenditure of more money, and they are demanded of every hospital and state that pretend to hold a place or a name among men as a friend of humanity.

INCOME TAXES

Between now and the fifteenth of March it will be necessary for hospitals, sanatoriums and allied institutions to give consideration to the federal income tax law and make such returns as are required by that law. THE MODERN HOSPITAL has, therefore, asked Mr. Ewing Laporte of Pittsburgh, who was assistant secretary of the treasury under three administrations and who is thoroughly versed in the principles and application of the income tax law, to prepare a statement for its readers. This will be found on page 159 of this issue.

As Mr. Laporte points out, it is important at the outset to distinguish between the liability to pay income tax and the duty to make a report to the government on which taxes may or may not be due. To the latter requirement all hospitals are subject, whether they are private hospitals or sanatoriums operated for profit by individuals, partnerships or corporations; hospitals or sanatoriums operated under charitable foundations and not for profit; or state, county or municipal hospitals or sanatoriums. The information hospitals and sanatoriums are called upon to furnish the government relates principally to the wages and salaries paid employes, and this requirement, let us repeat, applies quite as much to hospitals and sanatoriums operated by states, counties, or municipalities which are exempt as such from filing returns of income and from payment of taxes as it does to other hospitals.

Hospitals and sanatoriums operated by boards of trustees or similar bodies under a charitable foundation, and not for profit, are not subject to the federal income tax law if they meet the tests enumerated by Mr. Laporte. In order to establish their right to exemption, however, they must file an affidavit with the collector of internal revenue for the district in which they are located, showing among other things the character of the organization, the purpose for which it was organized and the sources and disposition of its income.

EDUCATING OUR LAWMAKERS

THE November election brought about a marked change in the personnel of the lawmaking bodies in almost every state. Whether these new representatives of the people are to be a success and enact such laws as will serve to the best advantage the communities from which they come will depend in a large measure on the influence that is brought to bear by their respective constituents. By influence is not meant the persuasion of the professional lobbyist, but that influence brought about by a broad and sympathetic knowledge of the actual needs of the people whom they represent. No man can be said to be representative of any community who does not thoroughly familiarize himself with the needs and responsibilities of local institutions, among them the hospitals.

It is clearly the duty of every superintendent and board of managers of such institutions to seek out their representatives and make known to them their needs. With these wants fixed in their minds, the legislators will approach their new duties not in an aimless sort of way but with a definite purpose of rendering a service where it is needed.

The power of combined effort in influencing legislation has long since passed the experimental stage. It is well known that organized effort can prevent or effect the passage of laws where the influence of an individual can not make itself felt. This alone justifies the existence of state and sectional hospital associations. True, all legislation

must be effected through committee, but it must be remembered that these committees are selected from the body as a whole and if each member is familiar with the needs of his local institutions it will greatly facilitate the passage of many laws needed to protect the hospitals throughout the country.

HOSPITALS SHOULD BE SPRINKLERED

LAVISH outlay in technical equipment and costly appointments for the comfort of the sick and convalescent, with only the most casual thought given to the emergency of fire, unfortunately constitute a condition all too common in hospital management.

Fire is a severe shock to the nervous system of persons in normal health, and its presence among large numbers of sick doubtless has been responsible for more deaths and retarded convalescence than is realized. Rapid and safe evacuation should be the first consideration in hospital planning, yet narrow halls are the rule rather than the exception.

Incipient fires having their origin within the building almost always will be extinguished by automatic sprinklers if they are properly maintained. Since its perfection the automatic sprinkler has conquered, in the early stages, many thousands of fires. The fact that a valve has been known sometimes to leak where sprinklers have been installed in wards is not sufficient reason for neglecting to institute this precaution, although many hospital authorities have given this occasional defect as an excuse for non-installation.

There is no doubt that the average hospital should be protected by sprinklers. They are desirable, as an added safeguard, even in those structures which are believed to be fully fire-resistive. Since the sprinkler system also can function as an auxiliary fire alarm, when so equipped, its value is two-fold: it indicates the location of the fire and instantly sets about quenching the blaze. Not even the shadow of a reason exists for failing to install sprinklers in kitchens, storerooms, laboratories, cellars, and other places of special hazard where patients are not confined.

Speaking of the hospital fire hazard, Robert Adamson, former fire commissioner of New York, once said: "It is peculiar that in an institution established for the highly beneficient purpose of caring for human life, the question of safety to life is disregarded when it is a simple thing so to arrange conditions as in large part to eliminate the possibility of fire. Medical science has made such progress that the fight against disease and subnormal conditions of body and brain are waged more successfully than ever before. Disease has succumbed to science, yet fire continues to kill just the same as ever. What a travesty on trust it is to safeguard lives from the ravages of disease and at the same time expose them to the perils of fire."

Nothing need be added to this clear statement of a fact that is fully as apparent today as on the day it was uttered.

CATALOGUES HAVE PLACE IN REFERENCE LIBRARY

THERE has just come to our desk a loose-leaf catalogue from the manufacturer of one of the most widely known lines of hospital furniture and sterilizing apparatus. This catalogue is printed on an excellent grade of coated paper and is not only replete with attractive half-tone illustrations that give the reader an excellent conception of various pieces of furniture and apparatus, but is also full of informative descriptive matter. The volume is bound in a substantial buckram cover.

This catalogue is one of several recently received by us which go to show that the manufacturers of high grade hospital equipment and supplies are more and more realizing the value of getting away from the old style of catalogue and are publishing catalogues which contain a considerable amount of information that will make the purchaser a more intelligent and discriminating buyer.

The value of these catalogues, however, rests wholly in their availability for use. Superintendents and purchasing agents should therefore maintain an up-to-date reference library of catalogues that come to them from time to time and put them to constant use.

DIRECTORY OF CONVALESCENT HOMES

A directory of convalescent homes in the United States has been published by Sturgis research fund of The Burke Foundation under date of 1923. This is the first attempt to present the scope of this public health activity throughout the country. From this list have been excluded a great number of beds which may be classed as borderline, such as pay homes, certain sanatoriums, fresh-air places, etc.

"The growth in special lines of skilled convalescence (as in heart disease) has been encouraging recently," says Miss Mollie E. Sinclair, R.N., supervisor of the admission department of The Burke Foundation, in a foreword to the directory. "Public health teaching is commencing to include convalescence in its curriculum, and some form of national association covering this much neglected section of health-making is in thought."

We affect to laugh at the folly of those who put faith in nostrums, but are willing to try ourselves whether there is any truth in them.—Hazlitt.

APPLICATION OF INCOME TAX TO HOSPITALS

By EWING LAPORTE, Pittsburgh, Pa.

THE question of application of the income tax to hospitals and sanatoriums groups itself naturally under three heads: first, state, county and municipal hospitals or sanatoriums; second, hospitals or sanatoriums operated under charitable foundations and not for profit; and third, private hospitals or sanatoriums operated for profit by individuals, by partnerships or by corporations. The first group is exempt from tax; the second is exempt under certain conditions; and the third is subject to tax just as is any other business operated for profit.

It is important at the outset to distinguish between the liability to pay income tax and the duty to make a return or report to the government on which tax may, or may not, be due.

All Hospitals Must Make Reports

All three of these groups are subject to certain requirements with respect to filing information returns, and since these requirements apply to all hospitals and sanatoriums alike they may be disposed of first.

Any hospital or sanatorium which made payments to any person or partnership of fixed or determinable income amounting to $1,000 or more during 1922 must make a report of such payments on or before March 15, 1923. Forms for this purpose can be secured from the local collector of internal revenue. The form is No. 1099 and is accompanied by a letter of transmittal on Form 1096, showing the number of returns filed. The street and number where the recipient of the payment lives should be stated if possible. Where no present address is available, the last known post office address should be given. This means that payments to employes, salaries, wages, fees, commission, etc., except for professional services, or other compensation if it exceeds $1,000, must be reported. Such information is required by the bureau in order to check the individual returns of the persons to whom the payments were made. With respect to hospitals and sanatoriums the principal items to be reported are wages and salaries paid employes. Payments for professional services are not required to be reported. If any doubt is entertained as to whether a particular class of services is to be regarded as of a professional character for the purpose of these returns, the safe course is to report the payments for such services and explain their nature on the return.

Must Estimate Board and Lodging

One point affecting these information returns which is somewhat peculiar to hospitals is that the compensation of their employes frequently includes meals, lodging, laundry, etc. The value of these items must be included in computing the amount of the compensation of each employe to be reported. It is taxable income to the employe and the information is therefore required by the government. It is often difficult to determine the value of such items. Any method that is reasonable may be used. Sometimes the employe, if not required to reside on the premises, is offered the choice of a certain rate of pay with board, etc., and a greater amount without these items. In that case their value might be computed at the amount of the increase. Or the cost of boarding the employe or providing any other services to him might be computed or estimated for a representative period such as one month. The bureau's regulations authorize this method of approximation to be used in the case of large establishments in determining whether the individual wages of a large group of employes amount to $1,000 or more, if the burden of exact computation would cause undue hardship.

In addition to this, if specially required and notified by the commissioner of internal revenue, every hospital or sanatorium, organized as a corporation and operated for profit, must render a return on Form 1097 of its payments of dividends or distribution to stockholders for such period as may be specified in the commissioner's notice, stating the name and address of each stockholder, the number and class of shares owned by him, the date and amount of each dividend paid to him, and when the surplus out of which it was paid was accumulated.

Hospitals or sanatoriums operated by states, counties or municipalities are exempt, as such, from filing returns of income and from payment of tax. They are subject, however, to the requirements outlined above as to the filing of information returns.

Charity Hospitals Must File Affidavit

A hospital or sanatorium operated by a board of trustees or similar body, under a charitable foundation and not for profit, is not subject to tax if it meets the following three tests:

1. It must be organized and operated for charitable, scientific, educational, or religious purposes, or for any or all of these purposes;
2. It must be operated exclusively for such purpose or purposes; and
3. No part of its net income must inure to the benefit of any private stockholder or individual.

If an institution meets these tests it is not required to file returns of its income or pay income tax, but in order to establish its right to exemption and thus to be relieved from the duty of paying the tax, the regulations of the internal revenue bureau require that every corporation claiming such exemption shall file an affidavit with the collector of internal revenue for the district in which it is located, showing the character of the organization, the purpose for which it was organized, the sources of its income and the disposition of such income, whether or not any of its income is credited to surplus or may inure to the benefit of any private stockholder or individual, and in general all facts relative to its operation which have any bearing in determining its status as to exemption under the law. To such affidavit should be attached a copy of the charter or articles of incorporation and by-laws of the organization.

Upon receipt of this affidavit and other papers by the collector he will inform the hospital or sanatorium whether or not it is exempt. When an organization has once established its right to exemption, it need not thereafter make return of income or any further showing with respect to its status under the law, unless it changes the character of its organization or operations, or the purpose for which it was originally created. The income tax law has been in effect several years and probably existing institutions have already determined their status as to exemption and need not therefore take any further steps in this connection during 1923. The duty of any such exempted hospital or sanatorium to file information returns as to sums paid by it in excess of $1,000 to individuals is not affected by its exemption from tax.

The third and last group comprises those private hospitals or sanatoriums organized and operated for profit, whether by an individual, a group of individuals in partnership, or by a corporation. Such institutions if incorporated are subject, as any other corporations, to the corporation income tax of 12½ per cent on net income. A credit of $2,000 is allowed domestic corporations, the net income of which is $25,000 or less. The excess profits tax on corporations is, however, no longer in effect. A corporation organized for profit must file a tax return whether it has made any profits or not, but an individual need only file a tax return if his net income is $1,000 or more if single, or $2,000 or more if married, or if his gross income is $5,000 or more whether married or single. This so-called "tax return" in the case of a corporation which has earned no taxable income is in effect an information return.

Special Partnership Returns

Hospitals or sanatoriums owned and operated by two or more physicians, etc., in partnership must make a partnership return on Form 1065. This is an information return, for partnerships as such are not subject to income tax. The return must be made regardless of the amount of net income, and must be sworn to by one of the partners. The return is made for the taxable year of the partnership; that is, for its annual accounting period, fiscal year or calendar year as the case may be, irrespective of whether the individual partner makes his own return on a fiscal or calendar year basis. This partnership return must specify the items of gross income, the deductions allowed, together with various other items of information required by the form. The individual partners will then report on their personal income tax returns, the distributive share of the partnership net income shown on Form 1065, whether actually distributed and received by them or not.

Hospitals or sanatoriums operated for profit by individuals are taxable just as any other business carried on by an individual. The owner is subject to normal tax and surtax on his income from the operation of the institution, which is included in his regular personal tax return.

The normal tax rate on incomes of individuals who are citizens or residents of the United States is 4 per cent on the first $4,000 of net income and 8 per cent on all in excess of that amount. Surtax rates on income of the calendar year 1922 and thereafter are graduated, beginning at 1 per cent of the amount by which the net income exceeds $6,000, and going as high as 50 per cent of the amount by which it exceeds $200,000.

"Net Income" Is Defined

It will be noted that income taxes are assessed upon what is termed in the law "net income." Net income for tax purposes differs in a great many respects from the ordinary business use of the term. For example, a great many items which in the ordinary course of business are charged up as expense are not recognized as such by the tax law. Questions as to what are allowable expenses, and therefore allowable deductions from gross income in computing taxable net income, are so numerous and varied that no general statement can be made as to rules governing. The determination depends on the facts and circumstances of each individual case. Care should be taken to preserve a contemporaneous record of all items of expense, and in case of doubt as to the propriety of any deduction the law and regulations should be examined, and perhaps advice of counsel secured.

It is important to distinguish between capital expenditures and current expenses of operation. Broadly speaking, capital expenditures are those items that are properly viewed as additional investments in the hospital plant itself, as distinguished from those for its maintenance and operation merely. They are not deductible expenses in computing net income. However, wear and tear, or in other words depreciation and obsolescence, of plant, equipment, etc., are allowable deductions from income before computing the tax.

MICHIGAN DRAFTS BILL TO PROTECT HOSPITALS AGAINST FRAUD

Sponsored by the Michigan Hospital Association, a bill providing for the protection of hospitals and sanitariums against nonpayment of bills, will be presented to the proper committee of the state legislature. Full text of the proposed bill follows:

Section 1. Any person who shall register as a patient at any regularly conducted hospital or sanitarium and who shall procure treatment or services from said hospital or sanitarium without paying therefor, unless credit is asked for and given by express agreement at the time of registration, or who shall have made any fraudulent statements at the time of securing credit, shall, upon conviction thereof before a Justice of the Peace, be adjudged guilty of a misdemeanor and shall be punished by imprisonment in the county jail not exceeding sixty days, or by a fine not exceeding $200 or by both fine and imprisonment in the discretion of the court. Neglect, on inquiry at the time of registration, to state inability to pay shall be construed as showing intent to defraud.

Section 2. Any person who shall register another as a patient at a regularly conducted hospital or sanitarium, which patient shall procure treatment or services from said hospital or sanitarium without paying therefor, unless credit is asked for and given the patient by express agreement at the time of registration, or who shall have made any defraudulent statements at the time when credit was given, shall be liable for the bill incurred by the patient and in default of payment shall, upon conviction therefor before a Justice of the Peace, be adjudged guilty of a misdemeanor and shall be punished by imprisonment in the county jail not exceeding sixty days, or by a fine not exceeding $200, or by both fine and imprisonment in the discretion of the court. Registering another, under the terms of this section, shall be construed to include all persons, who, by correspondence or by personal attendance at the hospital or sanitarium with the patient prior to or at the time of registration, have assisted in securing the admission of the patient, knowing or having reason to believe that said patient is unable or does not intend to pay, and have not specifically indicated that they would not be liable.

Section 3. Nothing in this act shall be construed as referring to a person who is admitted as a free or charity patient.

Nursing is an art, and if it is to be an art, it requires as hard a preparation as any painter's or sculptor's work, for what is having to do with dead canvas or cold marble compared to having to do with the living body?—Florence Nightingale.

"We haven't all had the good fortune to be ladies; we have not all been generals, or poets, or statesmen; but when the toast works down to the babies, we stand on common ground—for we've all been babies."—Mark Twain

THE DEBT WE OWE TO PASTEUR

By HORATIO M. POLLOCK, Statistician and Editor, New York State Hospital Commission, Albany, N. Y

ON DECEMBER 27, 1822 in the little village of Dôle in eastern France, Louis Pasteur was born. His father, Jean Joseph Pasteur, was a tanner who in his early manhood had been a valiant soldier in the army of Napoleon Bonaparte and had risen to the rank of sergeant major. Louis Pasteur's mother belonged to an old plebian family without special distinction. She was said to be active, enthusiastic and full of imagination, while her husband was reserved, slow of thought and given to introspection. Their home life was happy in spite of the heavy burdens that both had to bear.

Louis Pasteur was their third child. At the time of his birth there was nothing in his ancestry or in the environment of his home that would warrant any prediction other than that he might become a respectable tanner or tradesman and maintain the ordinary standards of his class. What he did become was due not to special gifts nor to favorable circumstances but rather to well-directed, steadfast work.

Calls Pasteur Greatest Benefactor

Louis Pasteur became the world's greatest benefactor. Search where you will among the annals of the great of all countries, you will find no one whose work has been so far reaching in its effects or has so benefited the whole human race. In saying this I do not forget the many gifted men to whom we owe so much of our modern civilization. But Pasteur's work was all-embracing. All that are now living in civilized countries owe tribute to him and the generations to come will all be richer, healthier and happier because of his work.

Pasteur began his professional career as a chemist and won distinction for his researches in crystallography. He then studied ferments and soon made the remarkable discovery that fermentation was due entirely to germ life. When Pasteur made the announcement of this discovery he was opposed by all the leading chemists of the time.

By examining the yeasts used by brewers he learned to distinguish between beneficial and harmful organisms and was able to help the brewers of France make better and purer beer. His methods soon after were adopted by the brewers of Germany, England and other countries and have proved highly profitable to them. Everyone who enjoys his glass of Muenchner or even of "near beer" owes a debt to Pasteur.

He later studied the so-called diseases of wine and in a short time was able to show the wine producers of France how to make better wine and to keep their product from spoiling. For the preservation of wine he devised the method of sterilization, now known as pasteurization. Again he helped both producers and consumers of all countries.

Eradicated Diseases of Silkworm

At the request of the government of France, Pasteur studied the diseases of the silkworm that were fast destroying the silk industry of Europe. After five years of arduous research Pasteur found the causes of these diseases and worked out methods of preventing them. Through the adoption of these methods the silk industry again flourished in France and Italy. The procedure outlined by Pasteur at that time for the production of silkworm eggs free from disease is now in use in all silk growing countries. Every grower and manufacturer of silk, every woman who wears a silk dress and every man who wears a silk tie has reason to thank Pasteur.

In his study of ferments Pasteur reached the conclusion that the then prevalent theory of spontaneous generation was utterly false. He studied the subject from all angles and becoming thoroughly convinced of the soundness of his position he boldly set forth his views in the French Academy of Sciences. He was much ridiculed by some of the most learned members of that body and a heated controversy arose that continued several years. Pasteur's demonstrations were so thorough that the fair-minded scientists of the day gradually came over to his side.

Pasteur's papers showing the impossibility of spontaneous generation came into the hands of Joseph Lister, an English surgeon, and to him they were of tremendous import. Lister reasoned that if pus-forming organisms in wounds made by surgeons were not formed spontaneously within the body of the patient but were introduced by instruments or bandages or the hand of the operators, as Pasteur had shown, then the formation of pus might be prevented by the use of antiseptic measures. Pasteur was right and Lister was wise. Through the genius of these two men the horrors of the old surgery passed into history and modern surgery took its place. Every patient who comes on an operating table, every soldier on the field of battle, in fact every person who suffers a wound of any kind may well thank God that Pasteur and Lister lived.

Conquers Chicken Cholera and Anthrax

Pasteur studied chicken cholera and learned how it might be controlled and prevented. In the course of his work with the germs of this disease he made one of his most remarkable discoveries. For inoculation purposes he ordinarily used broth cultures twenty-four hours old. One day he inoculated some hens with a culture that had stood for a few weeks, and great was his surprise when he saw the hens recover after a short illness. He later inoculated these same hens with fresh virulent cultures along with others just brought from the market that he used for controls. The latter all died while the former all resisted the virulent germs. The tremendous importance of this incident was at once recognized. He had found an effective and practical method of producing immunity against contagious disease. This was the beginning of a long line of protective and curative antitoxins, sera and vaccines—a field in which nothing had been done since Jenner introduced vaccination against smallpox in 1796.

In 1877, Pasteur took up the study of anthrax, a disease that was ravaging the sheep and cattle of France. Dr. Koch, a German physician, had isolated the anthrax bacillus the previous year but had made no progress in the treatment or prevention of the disease. Pasteur also isolated the germ, cultivated it and conducted an elaborate series of experiments to find some method of combating the disease. The anthrax bacillus formed spores and therefore the cultures of these germs did not become attenuated with age like those of chicken cholera. Virulent spores were found in the graves of sheep that had died of anthrax ten years before. Pasteur tried cultivating the bacteridum at different temperatures. At 45°C it ceased to grow; at 43°C it could still be cultivated but the spores would not develop. Cultures grown at

this high temperature became attenuated through lapse of time like those of the germ of chicken cholera. Sheep inoculated with cultures twelve days old were mildly affected but thereafter were refractory to virulent cultures.

One of the editors of the *Veterinary Press* had little faith in Pasteur's vaccine and proposed a practical test on a large scale. Pasteur agreed, and the now celebrated test was carried out at a farm near Melun. Sixty sheep were placed at Pasteur's disposal; 25 were to be twice vaccinated and two weeks later were to be inoculated with virulent anthrax culture along with 25 unvaccinated ones; 10 were to remain untreated. Pasteur predicted that the 25 unvaccinated sheep would all perish and that the 25 vaccinated would all survive. A similar experiment was undertaken on a smaller number of cattle. Great crowds witnessed the experiments and Pasteur's triumph was complete. His predictions were verified and the veterinarians who had derided him joined with the others in enthusiastic praise.

Later Pasteur studied and conquered a very fatal disease among swine known as rouget or swine fever.

By thus conquering contagious diseases among chickens, sheep, cattle and swine, Pasteur earned the gratitude of all who raise these domestic animals or use their products.

Announces His Germ Theory

On April 30, 1878, Pasteur read to the French Academy of Medicine his epoch-making lecture on the germ theory of contagious diseases. As a hypothesis the idea that germs were responsible for contagious disease had been suggested at various times but it was no longer a hypothesis with Pasteur. He had demonstrated it in many cases. Dr. Koch working independently had also demonstrated it in the case of anthrax. But in spite of these demonstrations there were many doubters among the medical profession and some boldly attempted to refute the theory. A new antiseptic surgery had become established and now a new era in medicine was being inaugurated. "Seek the microbe" become the slogan of progressive physicians. Pasteur had shown the way; a multitude could follow.

Pasteur's work was not finished. He turned to contagious diseases among human beings. Before completing his work with anthrax, he had isolated and cultivated the germ of puerperal fever and had explained the spread of the disease to the doctors at the Academy of Medicine. He now took up hydrophobia. His victory over this disease was his last and best known triumph.

He wanted to go on but as his health was declining he proposed the establishment of an institute for research and prophylactic work. The necessary funds were provided by popular subscriptions and Pasteur had the pleasure of seeing that ample provision had been made for carrying on the work he had started.

Pasteur died in 1895 at the age of 73. When 46 years old he had a cerebral hemorrhage that nearly caused his death. From that time on he was partly paralyzed. The prodigious amount of work he accomplished with such a handicap is almost beyond belief.

Pasteur Prolonged Life

One hundred years have elapsed since Pasteur was born and forty-five since he promulgated the germ theory. Many now living can remember the announcement of his great discoveries and can compare the two periods *before* and *after* Pasteur. William Osler in his history of medicine contrasts the periods in these words, "At the middle of the last century we did not know much more of the actual causes of the great scourges of the race, the plagues, the fevers and the pestilences, than did the Greeks. Here comes Pasteur's great work. Before him Egyptian darkness; with his advent a light that brightens more and more as the years give us ever fuller knowledge."

Vital statistics in this country were not very reliable in the years between 1870 and 1880, but it was commonly stated that the average length of life at that time for New York state was 33 years. An annual death rate in cities of 25 to 30 per 1,000 was not uncommon. Then came Pasteur and his successors. Sickness became less and the death rate began to decline. It dropped to 20 then to 18, then to 16 and to 14 and this year to 11. At the present rate the average length of life is not far from 60 years. The wonderful gain thus wrought in the short space of half a century largely through the work of Pasteur is the greatest achievement of the human race in its entire history.

All the world owes tribute to Pasteur. The direct economic gains from his researches amount to many billion dollars. But far transcending such material gains is life itself—life almost free from the many mysterious plagues that formerly beset it, and life prolonged so that it may come to complete fulfillment. For this we render homage to Louis Pasteur.

$2,250,000 GIFT TO UNIVERSITY OF IOWA FOR HOSPITAL

To assist in completing the building and equipping of a new hospital and teaching laboratories at the University of Iowa, the General Education Board and the Rockefeller Foundation jointly have given $2,250,000. This is said to be the largest gift ever made a tax-supported institution in the United States.

The new hospital and medical building will be erected on a new medical campus on the west bluff of the Iowa river where the Children's and Psychopathic Hospitals now stand.

The two foundations joined in proffering a gift of $2,250,000, providing the state of Iowa shall, over a period of five years, agree to complete the plant. This will require an appropriation of $450,000 a year for the next five years. The moment the general assembly of Iowa accepts the plan the university can begin the work, as the foundations' gift will be instantly available.

In spite of the fact that more than 20,000 state patients, mostly children, have been cared for and helped at the University of Iowa Hospital during the last few years, under the provisions of the Perkins Law, present facilities had come to be wholly inadequate and the board of education has realized that a new and modern plant has become a necessity.

TO BUILD HOSPITAL IN MEXICO CITY

Convinced that Mexico has regained a strong and capable government, Dr. Aureliano Urrutia, surgeon, has abandoned his practice in San Antonio, Texas, and after touring the United States and Europe will return to his home in Mexico City where he intends to build a $1,000,000 hospital and surgical school.

Dr. Urrutia, after studying medicine and surgery in Mexico City and France, became a professor in surgery at the University of Mexico, holding that position for ten years. For two years he was dean of the school and general director of the government hospital. He was in great favor with the Diaz, Madero and Huerto regimes, but came to San Antonio seven years ago, when the political situation interfered with his work.

THE DOCTOR AND THE HOSPITAL

By FREDERIC A. WASHBURN, M.D., Director, Massachusetts General Hospital, Boston, and Massachusetts Charitable Eye and Ear Infirmary.

THIS subject may be divided into two parts: (1) the hospital's obligation to the doctor, and (2) the doctor's obligation to the hospital.

1. The hospital's obligation to the doctor includes its obligations (*a*) to its staff, (*b*) to practitioners in general, (*c*) to physicians who send in patients, and (*d*) to medical students and interns.

(a) The hospital should treat its staff members with courtesy and consideration; it should grant their legitimate requests as far as practicable. It should make them feel that they are the strong right arm of the administration. By proper organization of an executive committee the staff should be made responsible to the trustees for recommendations of professional policies and staff nominations.

(b) The hospital and its staff should share with practitioners in general the advantages which accrue to the fortunate individuals who are on the staff. The hospital may place at the service of local physicians the resources of its x-ray, metabolism, cardiological, chemical, and pathological laboratories insofar as it can do so without interfering with its own work.

Courses for Practitioners

The hospital may also give courses on certain days a week which may be attended by practitioners of the neighborhood. In Boston such courses have been very successful and much appreciated. They have been chiefly a comparison of clinical and pathological findings with a demonstration of pathological material. Leaders in this work have been Drs. William H. Smith, Oscar Richardson and Richard C. Cabot.

The general practitioner always has patients with obscure maladies for whom he needs consultation and advice. He wants laboratory and x-ray examinations and, perhaps, the opinion of several specialists. For the rich, these things are provided by admission to private wards and hospitals and in the offices and laboratories of specialists. The poor have the wards and out-patient departments of our general hospitals.

The Massachusetts General Hospital has tried to provide a clinic of consultation for people of small means. Twice a week in the afternoon this clinic is held. Representatives of all professional departments are present. A small fee is charged. The money goes to the doctors after the hospital has been reimbursed for its extra expense for this clinic. Patients are admitted only upon recommendation of a physician. A report of findings is sent him at the conclusion of the examinations. It may be necessary for the patient to come a number of times but no second charge is made. Small laboratory fees are necessary. The patient is referred back to the physician. No treatment is given. The hospital has received repeated assurances from physicians using this clinic that it has been of great help to them in their treatment of patients of small means. The physicians upon the staff have given freely of their services to this clinic. The recompense is meagre but they have felt that they owed this service to their fellow practitioners less fortunate than they in hospital affiliations.

Service to the physician on a broader scale may be exemplified by the case records published by the Massachusetts General Hospital and edited by Drs. Richard C. Cabot and Hugh Cabot. This publication is sent throughout the civilized world and is of benefit not only to physicians who have access to hospitals, but to many an isolated practitioner in the remote wilderness.

Courtesies to Physicians

(c) How can the hospital help the physicians who send patients to it? The administration must see to it that all inquiries and applications are treated with courtesy. The admitting officer must try to put himself in the place of the harassed doctor at the other end of the telephone. He cannot grant all requests, but he can and must show the hospital's desire to cooperate.

After the patient is admitted, there are many courtesies that the hospital can show the physician who referred the patient. The physician should be notified by telephone of the time of operation. If the patient dies and an autopsy has been granted, the physician should be notified when it will take place.

Upon discharge of the patient, a letter may be written to the doctor giving a brief summary of the case, discharge diagnosis and, perhaps, suggestions for future treatment.

When a physician has referred a patient to the out-patient department a letter should be sent to him stating the diagnosis, and if he is sufficiently interested to make further inquiry, an abstract of record or other information should be sent him without charge. All this involves considerable expense and much work but it is an obligation to the physicians sending patients to the hospital. The institution is amply repaid by the kindly feeling thus gained for it.

Obligations to Interns

(d) The obligation of the hospital to its interns and medical students includes their education and training. This is so essential a part of a hospital's duty that I need only name it. The hospital must be sure that its interns receive at least a fair equivalent for the time and labor they give. Careful instruction should be given them and every effort made to see that they get the most possible from their service. The hospital will be repaid by the improved character of house officers and by the possession of fine loyal alumni.

There will be found few today to question the value of teaching to a hospital. It means keen, alert work in diagnosis and treatment. Fortunate is the hospital which has it.

We must see to it that students receive under proper restrictions every facility to acquire knowledge. It is best to make them as far as possible a part of the machine. This is the hospital's obligation to the medical student—the doctor of the future.

Doctor Must Combat Individualism

2. The second phase of this subject deals with the duty of the doctor to the hospital. By the very nature of his work the physician is an individualist. He works by himself or with a few others. He does not rub shoulders with the masses of men as does the business man. He is the autocrat of the sick room and if a surgeon, he is commander of the operating team. Hence, to work in the organization with many others is difficult for him and team

work of the hospital staff is necessary if results are to be obtained.

The successful doctor meets with something like worship from his patients, especially the women and perhaps from his house officers, medical students and nurses. Under these conditions we sometimes find a surgeon loses his sense of proportion. If he has not a well developed sense of humor he may even take for fact the estimate of him made by these youthful and exuberant partisans. Such a fault brings its own retribution. No one suffers like the vain man. He continually sees slights of his own importance and is always in trouble because of them.

Physicians do not take kindly to discipline. This is because they are individualists. I have known members of the staff to defy authority and state publicly that they would do certain things in spite of the well considered regulations laid down by the executive committee of the staff, trustees, or the director. Such action, of course, can only result in the confusion and humiliation of the perpetrator.

Speaking roughly or rudely to nurses has in the past been a habit with some men, particularly surgeons in the stress of an operation. If a man appreciated how it reacts against his own reputation we should soon hear no more of it.

I have known members of the staff to speak of the administration of the hospital in a disrespectful manner before house officers, nurses, or students. This cannot be ignored, for from it grows insubordination and contempt of authority.

With all these faults I wish to record my belief that among the physicians of a community you will find the highest ideals, the most generous motives, and the kindest and fairest treatment of their fellowmen of any group, bar none. In the two hospitals of which I have the good fortune to be director, I have met with the most cordial cooperation from the staffs. The team work has been good. The faults which I mention have been met only occasionally.

Physician Must Give Best Service

The physician appointed upon a hospital staff has an obligation to give adequate time and the best service that is in him to the hospital. He draws good from his service only in proportion to the work he puts into it. A hospital service should mean to a man the opportunity to perfect himself in his profession. If he is a surgeon, he becomes manually expert and improves his surgical judgment. If he is a physician, he sees many more patients at the hospital than he would outside and thus his clinical experience broadens. He comes into contact with other keen minds, and slovenly work is not likely to be tolerated. Service to his fellowmen is expected of every physician worthy of the name. The profession is not yet seriously tainted with commercialism. The member of a hospital staff has an opportunity to do much good for humanity. This may be in the actual care of patients, laboratory or research work, and the wise counsel or loyal support of those who are trying to make the hospital a success. Members of a hospital staff who are using their position simply for their own financial gain, or to increase their prestige, are of no use to the institution and should be driven from its sheltering arms.

Need Some Full-Time Men

The present hospitals of the country are in a transition period of staff organization. We have always known that between members of the staff of equal ability a man's value to the hospital is determined by the time, work and thought which he gives to the hospital. As the complexity of methods of diagnosis have increased and as the difficulty of keeping in touch with others' progress increases —not to speak of making progress for oneself—it has become more and more difficult for the busy practitioner to be on the hospital staff and give the hospital the sort of service required today.

From this fact has developed the full-time or paid part-time hospital physician and surgeon. This is a development in the right direction because it gives to the hospital, time, work and thought and continuity of planning and effort which the busy practitioner can never give it. On the other hand, I wish to record my firm belief that the hospital will always need on its staff for the direct care of its patients, men who earn their living in the practice of medicine and surgery; but only such men will be needed by the hospital as are willing to make a very definite monetary sacrifice so that they may give it an abundance of time. Such a man should take his reward in his increased prestige, the fact that this connection makes him a better physician or surgeon, and in the satisfaction of forwarding the interests of the leading factor for good in our modern civilization—the great hospital of the community.

The legitimate line of progress in the future would appear to be that all important professional services will be headed by men paid by the hospital for a large part of their time; that under them will be a group of paid men whose time is devoted to considerable extent in teaching and research; but that working with these men and with their rights zealously guarded by the hospital will be the unpaid practitioner who is willing to devote considerable time to the hospital work.

Protect Public Against Untrained Surgeons

It is an unfortunate fact that there are physicians in considerable numbers who have never received the requisite training, but who are trying to do surgery. To many of our people a hospital is a hospital and any doctor is a surgeon. A way must be found to protect these people. There should be some recognized mark of the competent surgeon and the trustees of all hospitals could then forbid others to operate in their institutions. The private commercial hospital would probably require state regulation.

A hospital must have autopsies if it is to check up the cause of its failures. The family physician can help the hospital there more than anyone else, and in aiding the hospital he adds to his own information.

It sometimes happens that the wrong diagnosis is made or the wrong treatment undertaken at the hospital. The hospital would be helped if the physician would send the patient back or write a letter calling attention to the error as it becomes clear.

In general, we may fairly say that if a hospital is doing its full duty, there will be no difficulty about it receiving the loyal support of the physicians of the community.

Without a good professional staff composed of able, unselfish men, a good hospital is impossible. Without a good hospital, correct medical teaching, progress in medical science, and good care of the sick cannot be had.

We should, then support the work of the American College of Surgeons which is making a notable contribution toward better surgeons, better staffs, and better hospitals.

A knowledge that another has felt as we have felt, and seen things, even as they are little things, not much otherwise than we have seen them, will continue to the end to be one of life's choicest pleasures.—R. L. Stevenson.

THE DOCTOR'S RELATION TO THE SMALL COMMUNITY HOSPITAL

By B. L. EIKER, M.D., Leon, Iowa.

FEW people have any accurate conception of what they are living for, they have no fixed or definite object in life; and are simply tossed about by civilization like rubbish by the tide. To this rule the rank and file of the medical profession are no exception. The average doctor is a willing listener to the siren voice of the salesman and as eagerly purchases awe-inspiring devices for his office as a hungry child plucks a green apple—and usually with about the same results. Many physicians are constantly trying new drugs, and endeavoring thereby to impress upon the public that they at all times have one ear to the ground to catch the first whisperings of advanced medical science. Their whole professional life is spent in an endeavor to convince the public of their own great worth. It follows, therefore, that no small community hospital can hope to function properly or to receive much benefit from a medical profession made up largely of men with no vision, men who do not think, men who have no desire to benefit anyone except themselves. To serve the modern small community hospital properly, the doctor should possess the three following characteristics: First, he should be a man with a well balanced mind, a mind capable of arriving at some definite and logical conclusion; second, he should be thoroughly educated and trained along lines pertaining to natural science, and upon this foundation he may safely lay a medical education; third, he should be a man whose habits and morals are at all times in strict keeping with his knowledge and with his attainments.

The Doctor's Character

A hospital, be it large or small, is a place where one puts his life in the hands of others; from it he emerges, cured, benefited or in a casket. Life is the dearest possession on earth and should be entrusted to no one who is deemed unworthy. The doctor must be the type of man whose work and deportment, past and present, are worthy of confidence. Primarily the success of the small community hospital depends upon the kind and character of its doctors. Reformed habitues, of whatever type, are like birds with the broken pinions, "They never soar so high again," and the hospital manned by doctors of this kind is sorely handicapped.

History shows that one great extreme follows another. The American people have been reckless and extravagant for the past five years. Bluff and pretense have had as high a market value as have ability and honesty. Our country is now beginning to see the folly of such standards and to reap the harvest of thistles instead of grain. It is entering upon a period of conservatism, a period when knowledge, ability, honesty and conscientious work will receive their true appreciation and reward. The octopus of conservatism is slowly but surely entwining its tentacles about the slimy and many-headed serpent of bluff, pretense, dishonesty and crime. The medical profession is at the head of this great crusade and has already begun the process of weeding out its less desirable members. The pretender with his fads and fancies may flourish for a season, but his life is short, his career is doomed and his only hope is to change locations frequently.

The doctor of this day must bear the same relation to the small community hospital that the modern minister bears to the church. He must point the way to avoid disease as well as to assist in its cure. By so doing, he will assist in making the modern community hospital a health center. Hospitals of the past have performed but two functions—surgical work and the care of incurables so as to make their last days more comfortable. The modern hospital must not only look after these two important functions, but in addition must assume the duty of helping to prevent disease. To this task the doctor must give freely of his help.

Our country appears to be headed towards hospitalization. The thoughtless but well-meaning public when confronted by disease, war or pestilence turns from its "opathies," "isms," fads and fancies, and flees like helpless sheep pursued by raging wolves toward scientific medical hospitals for relief. Doctors now in active practice and the younger ones to follow must meet and relieve these people promptly, and at the same time impress upon them the utter folly of half-baked, poorly trained, and deluded minds attempting to practice the healing art. In addition to this the doctor should practice what he preaches and himself live what he teaches.

To the young man and woman of character, ability, and honesty a greater field of service was never open than now stands before them in the study and practice of modern medicine. The day of single-handed work is past, the doctor and the community must work in conjunction with each other. Each one has a duty to perform in order that he may accomplish the one great purpose, namely: To make the community a better place in which to live and a safer place in which to rear children.

"Pretence, like the mushroom grows,
It dies 'ere it is born,
Dishonest work has no reward;
It's crown is from the thorn.
He who seeks to help mankind
With honest work and true,
Helps generations yet unborn
As well as me and you."

RESEARCH ON EDIBLE GELATIN

The Edible Gelatin Manufacturers of America, Inc., announces the establishment of an industrial fellowship in the Mellon Institute of Industrial Research of the University of Pittsburgh, for the purpose of ascertaining the real food value of edible gelatin in its manifold applications in the American dietary. The founding of this fellowship is the outgrowth of the desire of the members of the association to uphold high standards in the manufacture of this food and to have available for their own use and for the trade data of scientific and technical nature respecting its advantageous use in food industries.

In addition to experimental investigations, a correlation of all available facts regarding edible gelatin will be made, to be held at the disposal of all users and prospective users of the product. It is hoped that real service may be rendered by supplying scientific data and technical service.

APPLYING MINIMUM STANDARDS TO HOSPITALS*

By FREDERICK W. SLOBE, M.D., Hospital Standardization Department, American College of Surgeons, Chicago.

DURING the past decade an increasing attempt toward standardization in all fields of human endeavor has been apparent. At first, in certain respects, standardization in medical and hospital activities did not keep pace with its development in other lines. The American College of Surgeons, in its hospital standardization campaign, endeavored to correct this shortcoming. In essence, the application of the minimum standard to hospitals means the closest correlation of all medical and hospital efforts, and the highest degree of mutual cooperation between each individual associated directly or indirectly with hospitals.

"This entire campaign in the application of the minimum standard involves a three-sided relationship between the hospital, the staff and the community—represented by the board of trustees. The hospital is to do its part by furnishing facilities and equipment and cooperating with all reasonable suggestions from the staff. The community and its board of trustees are to do their share by intelligent interest in the hospital, a knowledge of the broad principles underlying hospital care and adequate financial support. If both the hospital and board of trustees realize their obligations and meet them fully, failure to obtain adequate results may be ascribed to the medical staff. Hospitals are built for the patient, their prime purpose being the care of the sick, and it is the simple duty of each physician to cooperate with hospital in all their efforts toward improvement. Increased cooperation will bring about a fuller realization of the spirit of the standard."

Personal contact furnishes the best index to the application of this standard. Our hospital surveyors, during personal visits to 1,600 of the general hospitals in the United States and Canada, have had certain observations impressed upon them so repeatedly that a brief enumeration of these impressions seems warranted.

Obey Letter But Not Spirit

In actual operation it has been demonstrated that it is no easy task to live up to the requirements of the minimum standard to the fullest extent, though at first sight it appears to be a comparatively simple, brief set of principles. Many hospitals are nominally living up to the letter of the standard, having adopted all its recommendations and put them into effect, without really living up to its true spirit. It must be realized, of course, that each hospital after adopting the minimum standard goes through various stages of advancement, beginning with the installation of the bare essentials of the program and gradually elaborating them until finally the full appreciation of their meaning is realized.

The staff situation involves so many angles that it is difficult to approach it in so short a space of time. There is no standard type of staff organization applicable to all hospitals. Local variations demand varied types of organization, hence it is for each hospital to decide which type best meets its individual needs. There should be, however, a definite organization, including the formation of sufficient committees to cover the various activities of the hospital, in order that responsibility for these activities be accurately centralized. The greatest difficulty here lies in the small hospital in the small community where the entire medical personnel of the community uses the hospital. In such instances, it may be wise in the beginning to include on the hospital staff all the ethical practitioners in the community, all of them being expected to attend the hospital meetings and to do their share in assisting the hospital toward meeting the requirements of hospital standardization. Later, various improvements and modifications in the staff organization may be instituted. A too radical or partisan arrangement of the staff in the beginning may do much to retard the subsequent development of the organization.

Another difficulty lies in hospitals which have a large list of so-called "courtesy" staff members in addition to their "regular" staff. Those physicians who utilize the hospital only occasionally are often less interested in its progress. Even though they use the hospital at infrequent intervals, they should be expected to live up to all the obligations which the hospital expects of its regular staff. The "courtesy" staff members should be informed at frequent intervals concerning the requirements of the hospital, that they are a part of the hospital so long as they send any of their patients there, and that they are expected to attend the staff meetings in case they have any patients in the hospital during the month preceding the meeting. By having these physicians on the staff meeting program from time to time, and encouraging them to feel that they are a part of the hospital, they are stimulated to greater cooperation.

The analysis of hospital results is the goal of our standardization program. Much confusion still exists concerning methods in which this should be brought about. Naturally the same method may not be applicable in all hospitals. The College features the regular monthly staff conference because it is the means by which the staff analysis is best undertaken in the vast majority of hospitals. It is indispensable in nearly all institutions; in only a small percentage can it be considered impractical, notably in hospitals with a staff of only one or two physicians where a formal conference is, of course, out of the question.

Teaching hospitals closely affiliated with medical schools and certain group clinics connected with hospitals may be analyzing their results in other ways, the former by a presentation of patients before students and the latter by a close association of the physicians. Even in such institutions, however, there is no question but that there are many occurrences of great clinical importance which lose much of their educational value because they have not been brought to the attention of the entire staff. The group clinic, therefore, should have a regular resume of its results brought before its staff. The hospital of only two or three physicians should conduct a similar though more informal review, and the teaching hospital may well bear in mind the added impetus which an analysis of this kind may bring about.

It is the feeling of the College that a large part of the monthly staff meeting should be devoted to an analy-

*Presented before the Hospital Conference of the Clinical Congress of the American College of Surgeons, Boston, October 23, 1922.

sis of the casualties including the deaths, infections, complications, unimproved cases and, in fact, anything closely related to the clinical work in the hospital. The discussion is impersonal, being a study of certain results and the relationship of those results to the hospital. An attempt at humiliation should not be countenanced; a clear, straightforward, educational discussion, however, will not invoke antagonism. Our failures are the greatest assets in the light of our experience if we only face them squarely.

There should be a program committee which carefully works out the program for each meeting; the record committee should analyze the charts and case records, and together with the program committee and historian should select those to be reviewed at the staff conference. These are given to the program committee, which notifies each physician that he is to present the history of a certain patient. Many hospitals confine almost their entire staff meetings to the analysis of their results; others add to the meetings a brief review of interesting articles in current literature, demonstrations of pathological specimens, reports of follow-up work and other items of interest. Hospital business should not consume the time for this important work; business matters should be handled at another time. It is for this purpose that the analysis sheet has been advocated by the College as a method of bringing before the staff a periodical review of its results. Various modifications to this sheet can, of course, be made but it serves as a useful means of suggestion.

Hospitals with a large list of "courtesy" staff members have difficulty in deciding whom they should expect to attend the meetings. Many hospitals solve the problem by inviting all to attend but *requiring* the attendance of those who have had patients in the hospital during the preceding month. Some physicians with multiple staff appointments object to the staff meetings, stating that too many of their evenings are thus occupied. It is uncommon to find many physicians who are extremely active in more than two or three hospitals and they should be willing to devote two or three evenings a month to their hospital affiliations. If they are connected with many other hospitals, it is usually in a consulting or relatively inactive capacity which does not require regular attendance.

Should Have Community Medical History

Relative to case records, the hospital is the logical repository for the medical history of a community. Physicians' office records often are so meager and varied that they cannot be depended upon to supply complete information in time of need.

If hospitals have deficient records in spite of a sufficient number of interns it is due to the fact that the interns are not performing their duties because of lack of supervision on the part of the administrative and professional staffs. The available number of interns is insufficient to supply the demand, hence, record clerks or historians are needed. Some hospitals which have only a part-time historian fail to realize the many functions of a case record department. In the future every hospital of twenty-five or more beds will have at least one full-time record clerk. At present, however, many hospitals find it satisfactory to utilize part of the historian's time in other activities of the hospital. In such institutions, record clerks should endeavor to perform the functions of an intern as regards the records as far as possible. This means the recording of a full comprehensive personal history, and taking by dictation the physical examination records, progress notes, and condition on discharge; keeping in touch with the current records on the floors to see that histories and examinations are written shortly after admission and before operations; and observing whether working diagnoses and progress notes are recorded.

In the cities a not uncommon difficulty exists in certain hospitals used almost exclusively by physicians who have studied their patients thoroughly in their offices, have had a large volume of diagnostic work performed outside, and bring the patients to the hospital only for operation or treatment, failing to realize the necessity for furnishing the hospital with the records. Such physicians often keep good office records; if so, the hospital should be sent copies; if not, the physician should cooperate with the efforts of the hospital to secure accurate records for its files.

Incomplete Records Indicate Little Supervision

A very common deficiency in hospitals which have recently instituted record systems is a very brief, stereotyped form of case record which seems to fit about eighty per cent of the patients and gives one very little knowledge of the diagnosis. In most instances this is due to lack of staff supervision of interns, record clerks, and of the records themselves. Operation records are notably weak in a complete description of the exploratory findings and operative technique. In order to insure accuracy they should be dictated or recorded during or immediately after all operations. Each physician is responsible for the record of his patient even though most of the labor may be relegated to an intern or record clerk. If so, the physicians should take sufficient time to insure the accuracy of the records. This will save him subsequent embarrassment, as well as insuring the patient and the hospital of accurate reports for future reference.

Sufficient space for the record room, conveniently located, must be available; in order to be used frequently and accurately, records must be immediately accessible. This means good filing cabinets and cross indices for names and diseases. Whether filed in groups by disease or filed numerically is immaterial so long as the record can be obtained immediately. There is no one standard disease nomenclature which is used by the majority of hospitals. At the present time, therefore, the international classification of the bureau of census, Department of Commerce, and the various well known hospital nomenclatures are being utilized.

Hospital Should Make Use of Records

Another great failing of hospitals is to make use of the records. After expending a great amount of time and money on them, it is a great economic as well as an educational loss if records are not utilized to the fullest extent. By using the records is meant chiefly the analysis of hospital results mentioned in connection with the staff meeting and with the work of the record and program committees. After a hospital has a complete record department, material of great statistical value will become available to an increasing extent each year. This will be particularly true when hospitals adopt more uniform nomenclatures so that their statistics are uniformly comparable.

The question of laboratory service involves varied interpretations according to the size, type and location of the hospital. Each hospital should have a laboratory of its own for the performance of the usual routine examinations such as various chemical, microscopic and bac-

teriological analyses. Naturally, the more technical tests may have to be performed outside as the available number of serologists and pathologists is not sufficient to supply each hospital. This applies especially to the hospitals in the small communities, in which the service is considered satisfactory if an adequate number of specimens is sent to competent laboratories.

Supervision of Technicians Necessary

Technicians should have adequate supervision either by a part-time pathologist who visits the hospital at regular intervals, or by some staff member fully versed in laboratory technique and interpretations. Some hospitals with the most complete laboratory equipment perform fewer tests per patient than hospitals with relatively meager equipment. Laboratory service, therefore, is not always proportionate to the laboratory facilities themselves. This discrepancy is often due to the system of laboratory charges and affects particularly private patients, where a separate charge is made for each test performed. There is often a hesitancy on the part of physicians to prescribe certain laboratory tests if they realize that a separate charge will be made each time. This can be obviated first by the adoption of a flat-rate fee to include the usual laboratory examinations, or by charging no fee at all if the cost of the laboratory is determined and subdivided by adding a certain charge to each room or rate per day. The hospital then can insist upon a certain laboratory routine without adding a separate charge for each test performed. Tissue examinations must be included in this, in order that the hospital may have every specimen sent to the laboratory. This should be as rigid a part of the operating room technique as the sterilization of instruments. As many specimens as possible should be sectioned and every specimen should have at least a gross pathological report.

Naturally there can be no definite so-called minimum recommendations as to what routine tests a hospital should perform, owing to the varying conditions in hospitals and the danger of hospitals limiting their tests to the minimum as a result. In addition to the almost universally routine urinalysis, however, a routine hemoglobin estimate and leukocyte count are becoming increasingly prevalent. These, in addition to a routine examination of tissues, serve as a good basis for a minimal, routine laboratory requirement, but physicians should be encouraged to a more routine use of laboratory facilities exceeding any arbitrary or "minimal" requirement.

Three Sided Relationship Under Standard

In x-ray laboratories, the problem of adequate roentgenological interpretation is a serious one, as there is an insufficient number of trained roentgenologists to supply the demand. Here also the question of supervising each x-ray technician is important. A roentgenologist should be in charge of each x-ray laboratory, even though he spends only a few hours there each day for the interpretations. The responsibility of these interpretations should be in the hands of these trained roentgenologists. If left to the various physicians, the patients will not get uniform x-ray service. Should every small hospital have a complete x-ray equipment? The answer in general is in the affirmative, although many small hospitals have access to very complete adjacent x-ray laboratories which serve them very well in many instances. The question, however, of giving service to patients who are not ambulatory would seem to require at least a portable x-ray equipment in every hospital.

This entire campaign in the application of the minimum standard involves a three-sided relationship between the hospital, the staff and the community—represented by the board of trustees. The hospital is to do its part by furnishing facilities and equipment and cooperating with all reasonable suggestions from the staff. The community and its board of trustees are to do their share by intelligent interest in the hospital, a knowledge of the broad principles underlying hospital care and adequate financial support. If both the hospital and board of trustees realize their obligations and meet them fully, failure to obtain adequate results may be ascribed to the medical staff. Hospitals are built for the patient, their prime purpose being the care of the sick, and it is the simple duty of each physician to cooperate with them in all their efforts toward improvement.

The principles of the minimum standard have been adopted by over four-fifths of the general hospitals on this continent. A progressive improvement in hospitals is everywhere apparent; but there is need for a closer insight into the real meaning of these principles. Let us hope, therefore, that each hospital superintendent, each member of a board of trustees, and each physician will see more clearly his individual obligation and responsibility and that the increased cooperation resulting therefrom will bring about a fuller realization of the spirit embodied in the application of the minimum standard.

SANATORIUM FOR PRISONERS OPENED

The new state tuberculosis sanatorium for inmates of Michigan's penal institutions is completed and ready for occupancy, according to information received from Dr. R. M. Olin, commissioner of the Michigan department of health. The building has been erected since July 1, 1922 at a cost of $10,000.

This sanatorium is one of the tangible results of the work of the health department's bureau of institutional health administration, organized in September, 1921 to cope with the deplorably unhealthful conditions then existing in state prisons and reformatories. The surveys made by the department of health showed that tuberculous prisoners were quartered with those who were not infected with the disease and that the living conditions were such as to encourage a rapid spread of tuberculosis.

Members of the health department believe that the new sanatorium will aid in the cure of persons who have already contracted the disease and halt its spread among other prisoners.

Another undesirable feature of Michigan's penal system was uncovered by this survey. It is the indiscriminate housing of mentally subnormal persons with those of normal mentality. A psychiatric unit, authorized to investigate the mental status of incoming prisoners in these institutions has now been made possible by the state administrative board.

If present plans mature, this clinic will attempt to solve the problem of segregation.

It is wholesome and bracing for the mind to have its faculties kept on the stretch. It is like the effect of a walk in Switzerland, upon the body. Reading an essay of Bacon's for instance, or a chapter of Aristotle, or of Butler, if it be well and thoughtfully read, is much like climbing up a hill, and may do one the same sort of good. Set the tortoise to run against the hare, and even if he does not overtake it, he will do more than ever he did previously—more than he would ever have thought himself capable of doing. Set the hare to run with the tortoise, he falls asleep.—Guesses at Truth.

RECENT HOSPITAL DECISIONS

By DOROTHY KETCHAM, Ann Arbor, Mich.

A RECENT decision of the supreme court of Ohio upholds what is known as "the pay-patient law," the claim being made by Hamilton County that the law is unconstitutional, violating the rights of the defendant.

The sections of the general code (1898 Art. 1815-12) in force during this period of the proceeding, provided specifically "that the cost of support of any county's inmates at the institution for feeble-minded youth should be charged against such county," presenting the manner of requisition and payment.

It is contended that the provision violates the state constitution reading, "Institutions for the benefit of the insane, blind, deaf, and dumb shall always be fostered and supported by the state; and be subject to such general regulations as may be prescribed by the general assembly."

It was contended that the state is ordered to support such institutions and that the legislature can neither authorize nor order a county to levy a tax to meet the expense.

As early as 1822 in the state the constitutionality of a somewhat similar provision was challenged. Since that decision "provisions have been enacted requiring persons liable for the support of one committed to such an institution to pay a portion of the expenses of the maintenance of such a person, but, in the case of indigency, the several counties are required to make payments for the maintenance of persons committed therefrom to such institutions. If the requirement that individuals liable for the support of a person committed pay a portion of the expense of maintenance, or that it be realized out of the property of such person himself, is not in conflict with the constitutional provision referred to, it is difficult to see how a requirement that in the event of indigency the county from which the patient is committed shall bear such expense is violative of such constitutional provision. The institution is fostered and supported by the state, notwithstanding the requirement that those able to support and liable for the support of a patient committed thereto be required to contribute to such expense, and that where such conditions do not obtain the county from which the patient is committed be required to do so."—*State vs. Hurve, 137 N. E. 167.*

THE property of the Seaside Home owned and used by a corporation of New Jersey for charitable purposes was held by the supreme court of the state, November 8, 1922, to be exempt from taxation although not in actual use on the date of the assessment.

The question was: "Was the home actually used within the meaning of the statute, as a home, at the date of the assessment? The property was used exclusively as a summer home for eighteen or twenty years. It is solely adapted for summer use. The particular purpose and use of the property is a summer home for children and old persons supported by charity. There is no question raised as to the charitable purpose of the home."

The taxing statute under which exemption was claimed states: "All buildings actually and exclusively used . . . for religious, charitable or hospital purposes. . . ." The state board, it seems, held that the words "actually used" means in actual use on the day of the assessment. This interpretation the court declares is too rigid, ignoring the spirit and purpose of the statute. "The test of exemption cannot be made to turn upon the fact of an accidental closing of the home depending upon the weather, sometimes earlier, sometimes later in the season." On the other hand the court distinguishes this case from certain others in which property "intended to be used for a charitable purpose" but which had never been used for such purpose, and was not in use on the date of assessment, was taxed. "Intention to use property cannot be made the test of exemption from taxation, under the statute."—*Seaside Home vs. State Board of Taxes, 118 At. 705.*

THE supreme court of Mississippi on November 21, 1922 stated that the "hospital conducted for private gain is liable for injuries to a patient resulting from the negligence of its employes. The business of such a hospital carries with it an implied obligation to give the patients therein reasonable care and attention."

It seems that a child of eight who had an attack of appendicitis was taken to the hospital for care and was there operated. Shortly thereafter when there was no attendant in the ward, she fell off the bed on which she was lying and soon thereafter died. The court adds that the liability of the appellee is a question for the jury to decide and consequently a previous decision was reversed and the case remanded.—*Maxie vs. Laurel General Hospital, 93 So. 817.*

THE hospital in this case prior to 1921 was managed by five trustees, three officers being ex officio members, and two being selected from the employes by the president. That year an action was brought by the state against the hospital association and its trustees, challenging among other things the validity of the method by which the two trustees were chosen. It is unnecessary to go into the details of the case, it being sufficient to say that where the stipulation entered into, provided that "all trustees shall be persons of good moral character," the supreme court of Kansas, November 4, 1922, held that the possession of a good moral character becomes an essential qualification to hold office. It was held that one of the trustees who had recently committed embezzlement "is not eligible thereto, unless upon a showing of reformation, and his ineligibility is not affected by the fact of his having received a plurality of votes at the election."—*Hempstead vs. Atchison, Topeka and Santa Fe Hospital Association.*

The importance of resistance is everywhere and in all things apparent. It's the resistance of the water against the propeller that makes navigation possible. It's the resistance of the steel rails against the wheels of the great mogul engine that makes it possible for the Twentieth Century Limited to run the 1,000 miles between New York and Chicago in eighteen hours. The resistance of the road-bed to the rubber was necessary to Resta's famous automobile record of two miles a minute.

If there were no resistance in life and business, then there would be no room at the top for the live wires. Do not accept the resistance which you meet in your work as an unnatural and insurmountable obstacle, but merely as the necessary "traction" by which you will move forward.

THE INFORMATION DESK

No satisfactory solution to a problem in your hospital is too trivial to pass on to other workers in the field. No question that perplexes you is too small to bring to the attention of those with greater experience in the field. This department is the readers' exchange, and its usefulness is dependent upon the measure in which its readers share their problems and their discoveries.

AN EPIDEMIC AND NO ISOLATION WARD

What is the Prairie Center General Hospital to do in case a small epidemic breaks out? It has facilities for isolating only two patients and has no funds for building a separate isolation ward.

Here's what Dr. D. L. Richardson, superintendent of the Providence City Hospital, would do if he were running the hospital at Prairie Center:

Isolate the sick at the earliest possible moment.

Put immune patients in alternate beds with non-immune.

Observe all non-immune patients for the full incubation period of the disease.

Practice strict cleanliness where patients are isolated in the hospital, such as scalding of all utensils and frequent washing of hands in caring for patients under observation in the same ward.

"It is probably wise," says Dr. Richardson, "to keep non-immune patients under careful supervision, as already has been indicated, and to send them home at the first signs of infection. It would be best to send all children home who develop the disease in a small hospital where isolation can be poorly carried out, or not carried out at all, unless there are many other small children in the family.

"If isolation cannot be carried out in the hospital throughout the illness, it is better that one or two of the patients' family be infected than to have all the children in the hospital either exposed or infected."

IF DOCTORS WON'T WRITE HISTORIES

"What shall the superintendent of a small hospital do," asks one of our readers, "when she finds that the doctors will not write histories for the hospital's records. Our hospital has provided x-ray and laboratory records sheets according to the standardization forms, but the doctors are failing to make use of them."

There are mutual obligations in the matter of keeping records. It is the hospital's duty to have adequate equipment and personnel for an up-to-date record department. This includes a record department ample in size and readily accessible; satisfactory filing cabinets; card indices and record forms; and adequate personnel in the form of interns or one or more record clerks.

The obligation of the staff members is to make adequate use of this record department and to insure adequate and complete records for every patient. If the records are written by interns they should be carefully supervised and checked over by the physicians; if no interns are available the records should be dictated to the historian, subsequently to be re-checked by the physician; if no historian is available, each physician should personally record the essential data, although in such instances it is more difficult to obtain complete records due to the amount of time involved in writing a complete record.

The responsibility of a hospital in guaranteeing competent medical care in a community is becoming recognized more and more. If a hospital is to live up to this responsibility it must have the right to discriminate in its selection of its staff members.

Having instituted the necessary machinery and equipment for the case record department and the laboratory, the hospital expects the cooperation of its staff members in both departments. Through the record and laboratory committees the staff members are interviewed relative to their shortcomings, the effort being made to increase cooperation. If this fails, the executive committee may add its influence and *finally* the governing body of the hospital has the right to exercise authority *in refusing hospital privileges to those who persistently refuse to cooperate with the accepted standards of hospital practice.*

ARE SINKING FUNDS PRACTICAL?

Establishment by the hospital of a sinking fund to replace its buildings always is a good question for argument when hospital superintendents or trustees get together.

Mr. C. A. Lindblad, superintendent of Buffalo (N. Y.) Homeopathic Hospital, who has had experience in business as well as hospital administration, thinks that *while the establishment of sinking funds is theoretically desirable, practically the idea cannot be made to work.* On this subject he makes the following informal remarks:

"Few hospitals in our country are entirely free of debt and such institutions might seriously consider securing annually a sufficient amount in pledges or donations to equal the amount necessary to set aside as a sinking fund for depreciation and replacement of buildings. However, there is still a shortage of hospital beds in almost every community, requiring that hospitals continue to expand and add to their facilities for the care of patients. Added to this, the continually increasing standards in hospital work with its increase in cost of maintenance requires all that can be secured from patrons and friends to make the annual deficits as small as possible.

"If we were to consider hospital work from a business viewpoint only, we would simply increase our rates for

service until the income would be sufficient not only to care for the annual cost of maintenance but to allow for a surplus to be set aside for depreciation. The cost of hospital service would then be prohibitive to the large majority of the people, which is already the case in many of our hospitals, and as a result the hospital is not doing the work for which it was organized.

"It is the aim of every hospital to give a maximum of service or at least give the patient every necessary means for recovery at a minimum cost to the patient. To continue this work the hospitals everywhere are striving to increase their endowment funds and their annual contributions. The outlook at present even in our most prosperous hospitals does not indicate the probability of their being able to set aside or to raise funds for the specific purpose of creating a sinking fund for buildings.

"Aside from this, human nature is such as to make it impossible, in my opinion, to secure much of a response for such purposes. Those who contribute to hospitals, whether during their lifetime or by bequest, usually prefer to specify the purpose for which the money is to be used, and like to see something tangible result from their gift soon after it is given. Even endowment funds for the purpose of charity work are slow to grow, although the income tax laws have had a tendency to increase bequests for charitable purposes. I believe that any hospital doing a good work can count on the community responding to an appeal for new buildings at any time when such need is shown.

"Although only a matter of record, every hospital should provide for depreciation in its accounting system, and each year's report should indicate the amount required for the purpose. This varies with the character of building construction and the type of equipment therein. The government in its tax rulings, allows from 1 per cent to 3 per ment in its tax rulings allows from 1 per cent to 3 per that with the modern fireproof building, even less than 1 per cent is allowed for depreciation. In the case of furniture and apparatus the amount necessary varies from 8 per cent to as high as 20 per cent for such items as x-ray and motor equipment. In our own hospital we are at present charging 5 per cent on buildings and equipment, which can be reduced or increased as our experience may dictate.

"To indicate more clearly how we show this, there follows a copy of the income, and profit and loss account statement for the Buffalo Homeopathic Hospital for the fiscal year ending June 30, 1922. You will note that on operating or so-called maintenance account alone, we were enabled to close the year with a slight profit, but considering depreciation, an item I think every hospital should show in its annual report, we necessarily closed the year with a deficit."

INCOME AND PROFIT AND LOSS STATEMENT, JULY 1, 1921—JUNE 30, 1922.

BUFFALO HOMEOPATHIC HOSPITAL

Income

From Patients:		
Private rooms		$112,113.22
Ward		49,720.84
Operating room		15,960.25
X-ray		11,686.10
Special nurses' board		9,256.00
Anesthesia		6,160.35
Laboratory		4,897.75
Hydrotherapy		4,476.50
Delivery room		4,100.00
Ambulance service		2,627.76
Drugs		2,121.94
Cots		218.45
Food, extra		147.68
Electric fans		9.25
Miscellaneous		37.59
TOTAL OPERATING INCOME		$226,833.98

Expenditures

Expenses—operating		$224,162.90
Gain on operations		$ 2,671.08
Add—Income from other sources:		
Board of women managers	$ 6,303.60	
Donations	105.00	
Fund committee	3,283.97	
Discount earned	74.89	
Cash over	2.57	
		9,770.03
		$ 12,441.11
TOTAL OPERATING INCOME		
Deduct:		
Interest on mortgages and loans	$ 10,048.06	
Reserve for bad debts	2,316.94	12,365.00
Net gain, exclusive of allowance for depreciation		$ 76.11
Less reserve for depreciation		11,955.76
NET LOSS FOR YEAR		$ 11,879.65

WHEN PATIENT CONTRACTS CONTAGIOUS DISEASE, WHO PAYS?

Through a mistake in diagnosis on the part of an attending physician, Patient A who had a contagious disease recently was admitted into a certain hospital and Patient B contracted the disease. Consequently Patient B was quarantined for a number of weeks. Who should stand the extra expense—Patient B, the hospital, or the attending physician?

Dr. Herman Smith, superintendent of Michael Reese Hospital, Chicago, is of the opinion that Patient B should stand it. In support of his opinion he says:

"Assuming that the attending physician made a mistake and did not knowingly send in a patient with a contagious disease, I do not see where this situation varies from one in which a patient admitted for some non-contagious disease contracts a contagious disease in the hospital and another patient contracts this disease from the first. In some instances the courts have ruled that if hospitals exercise all due care to prevent transmission of disease, and in spite of these precautions, disease has been transmitted, the patient contracting the disease has no recourse against the hospital, because the hospital exercised due care to prevent this transmission and because patients entering hospitals must accept the ordinary hazards of hospital life.

"On this basis, *I do not see where the hospital would be obliged to take care of the patient free of charge, nor do I feel that the physician who made the mistake should stand the extra expense.*

"It is not an accepted principle, nor do I think it will be for a good while to come, for hospitals to accept patients for operations at standard rates on the basis that the patient should be able to leave the hospital in a certain number of days, and that if any complications arise, it is the hospital's fault and the hospital should stand the extra hospital care.

"The foregoing opinion has been based on the assumption that because of the physician's error in diagnosis, the hospital did not know Patient A had a contagious disease and therefore instituted no precautions. I have intentionally taken this matter in its worst aspect, because if the hospital had exercised the ordinary quarantine procedure, it would never have considered the question of remitting charges.

If the physician knowingly sent in Patient A he should be barred from sending in any other patients in the future, but, because of the above reasoning, I do not feel that even in his case, should he be asked to pay for the extra expense."

Desultory studies are erased from the mind as easily as pencil marks; classified studies are retained like durable ink.—Cooper.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Department of Nursing Education, College for Women,
Western Reserve University, Cleveland, Ohio

COOPERATIVE PUBLICITY

IN discussing the subject of publicity for schools of nursing in the preceding issue it was stated that letters had been sent to principals of schools of nursing in various parts of the country, whose success in attracting students has been outstanding, in an attempt to find out the reason for their success.

Their replies are here published, the first a contribution from a well-known school in the Middle West. It is interesting to note that the experience of this principal agrees in all salient points with that of her colleague in New England. The second contribution is from one of the first schools of nursing to be definitely connected with a university, and the pertinent question at the end of this paper is worthy of thoughtful consideration. The third article is from a university school in the West. Thus are furnished two contributions from university schools, and one from a school not connected with a university. If obliged to sum up all that is outlined in these papers in three words, they would be, *education and fair play.*

School in Middle West

As a large number, if not most of the young women in this Middle Western school, have come through the direct or indirect influence of the graduates of the school, it would seem that the main reason why applicants are now attracted is because in the past the school has met the approval of those who have spent time in it, who know its conditions and are willing to recommend their friends to enter.

Since early organization in 1903, it has been the endeavor of those responsible to make it manifest to the young nurse that she would find a continuation of the treatment she had been accustomed to in the private school or the college from which she came, and while the conditions of the life and the many problems of a busy hospital not always have allowed the intention to be carried out, the evident desire has been accepted by the students and they have been happy and satisfied under conditions which, as in all other hospitals, are not ideal.

Second only to meeting the expectations of the student body, is the need of satisfying parents that their daughters will not be overworked; that they will be carefully supervised; that their health will be safeguarded; and that the general surroundings are such as will properly develop those they hand over to the care of the school.

Inducements to Enrollment

After careful observation and study of the parents and daughters upon whose interest and approval depend the nursing care of the hospitals of the country, it appears that the following features seem particularly to appeal:

The preliminary six months' period during which time the student nurse has short daily hospital duty with intensive classroom work, allowing a gradual familiarity with hospital conditions; at the expiration of the preliminary period, the eight-hour duty, night as well as day, with the customary weekly half-days; an atmosphere in the nurses' home which strikingly impresses the newcomer and her parents with a feeling of welcome and of thoughtfulness for her and for her general welfare, this impression not fading as novelty disappears, but continuing to be felt by the young woman throughout her period of training; provision made by the medical staff for systematic supervision and care of the health of the student by its members, with the presence in the home of a graduate nurse whose exclusive time is given to the care of the student's health.

In considering the needs of the school, early recognition was made of the fact that the modern woman demands education and proper preparation for the work she selects, it being also conceded that she who chooses nursing is in all essentials *a young woman of her time.*

To secure the necessary education and other conditions of successful organization, the vital interest and active assistance of the medical staff, the support of a strong board of management, the influence and help of an auxiliary board of wide-awake women, and a carefully selected nursing personnel, were concentrated on studying those features which had been tried out and approved by recognized schools of nursing in this country. Naturally, to the medical staff fell the responsibility of medical instruction and, through close affiliation with the medical school of a university the necessary elementary sciences were provided for, classroom instruction of a uniform order was assured and has been maintained.

The board of management has allowed a sufficient number of graduate nurses to instruct and supervise properly, also necessary dietitians, a corps of orderlies, maids, and ward helpers to carry routine hospital non-nursing duties, and graduate, rather than student, nurses for special duty nursing. It has also provided a properly equipped home for its nurses, placing in the home not only class, lecture and recreation rooms, but also dining rooms and kitchen with the housekeeping personnel to carry an establishment designed for the care of a group whose needs combine those of the manual worker and of the student.

The Woman's Auxiliary Board has done many of the various and unclassifiable things which only the right kind of women who are really interested can do, and which mean so much in bringing opportunity and happiness to the student body. They have not tied themselves down to specific responsibilities but have responded to calls both numerous and diverse in character, and this possibly has made their assistance more valuable. Selecting furniture for the home; assisting in the choice of school uniform and pin; aiding class room work by gifts of microscopes, reference books and other equipment; bringing about the student nurse's desire for the installment of a branch of the National Student Y. W. C. A.; suggesting, arranging for, and partially financing a well-conducted choral organization; and giving financial assistance to students unable

to carry themselves through the period of training, represent a few of their contributions.

The graduate nurse personnel not being "sweated" as a recent prominent visitor to this country remarked about an American hospital which he visited, the effect of overwork and discouragement, first manifesting itself in the graduate body and then spreading to the student nurses, has not been in evidence, but a spirit of loyalty has grown up which can only be found among those who are fully, interestingly, but not exhaustively, occupied. The fact that physical effort has been reasonably limited has made it possible for the graduate staff to study the needs of the student nurses in classes, in practical work, and when free for rest and recreation.

For this reason also it has been possible to study other nursing schools, to find what seems best in each and to adopt what appears desirable so that there has been no standing still, but each year new, worthwhile things, either original with this school or copied from others, have been added. Sometimes, due to the cooperation of the medical staff and of the lecturers, it has been an improved, or an additional course of lectures; again an affiliation with an institution or a school bringing broader theoretical or practical opportunities; or it may have been yielding to the tendency of the day to grant credit in time to college women; or adoption of a pleasing form of recreation; or a closer supervision for health's sake of methods of spending annual vacations. It has always been *something*, and that something of a nature to interest and help the young nurse to go out better prepared for future work than her predecessor.

Summed up, what is required in my judgment to bring applicants to our nursing schools, and what has brought them to this school are cooperation and understanding,—cooperation on the part of the superintendent of the hospital and his assistants; the interest and helpfulness of the medical staff; support and confidence of managing boards and of the local public; so that all, including the student nurse and her parent, may realize that a generous policy of thought is necessary and is given with ample consideration for the educational, physical and moral welfare of the young woman in return for the years of service she gives to the hospital.

Thirteen years ago the University of ———— established a school of nursing, the entrance requirements being graduation from an accredited high school, and a preliminary course of four months in the university, taken at the student's expense, during which course the student was not on duty in the hospital.

Until the spring of 1920 we had enough students to meet the needs of the hospital, and yet were able to reject students who did not carry their preliminary and probationary work in a satisfactory manner.

Our records show:

1918-19	35	entered	university	27	entered hospital
1919-1920	23	entered	university	20	entered hospital
1920	15	entered	university	10	entered hospital

In 1918 four dropped out on account of illness, three were dropped for poor work and one withdrew.

In 1919 three were dropped for poor work in the university and three for unfitness shown during the probation period in the hospital.

In December 1920 five were dropped for poor work in the university.

We have not accepted any student under twenty years of age.

The university is trying to meet the need for additional students not by lowering its standards, either of education or age, but by making it possible for a student to enter the school with less expenditure of money.

The board of regents has agreed to provide board and room during the three months of the preliminary term when the students are not on duty in the hospital. They live in the nurses' home during the second three months and are on duty in the wards four to five hours daily. The fees to the university are paid by the student.

The course under the new plan was offered for the first time in the spring quarter, beginning in April, 1921.

As a result of stating this change of policy to those who made inquiry after the change was authorized, we had an increased number of applicants even before a general public announcement of the change of policy was made.

Schools that provide enough well-given theory to make the practical work interesting, well-equipped graduate supervisors able to teach the nursing subjects, variety of services and rotation in these services, so that nurses are given a well-balanced practical training, comfortable living quarters and the same freedom that is allowed to other young women of the same age in colleges, will attract educated young women and hold them. It should be unnecessary to say that the hospitals whose nursing service is supplied by schools of this type are able to give to their patients the very best care.

If the present problems in our nursing schools arouse enough interest in those responsible, to make them really

WHAT A NURSES' TRAINING SCHOOL STANDS FOR*

To what does a diploma from a good training school for nurses testify?

The diploma does, presumably, testify to three years of practical experience in caring for the sick and three years' study of the art and science of nursing.

The diploma does not guarantee those qualities of mind and heart which are refined by contact with suffering to something like pure gold. The diploma does, however, testify to a courage that does not flinch, or quail, or run away from certain diseases which some men fear more than they would fear machine guns.

The diploma of a good training school does testify to certain womanly qualities that are welcome in a sick room. The young woman who wants to be a nurse for the work's sake must have qualities that would honor a most desirable home of her own. The girl who will not run away from pneumonia, or diphtheria, or tuberculosis, or any more active infectious sickness, when it is her job to fight the good fight, must have qualities that would honor any vocation or any position in life.

That kind of courage is not the only quality that makes the kind of nurse we most love and honor. There is a moral courage which does not hesitate to report an error of its own. It may take more courage to confess a mistake than to stand by a dreaded disease to the finish. There are men who find it harder to confess a fault than to face a cannon. We hope we can claim that a diploma from this training school stands for moral qualities that will forget self to obey the call of the higher ideals of nursing.

*Brief address to nurses' graduating class at City Hospital, Worcester, Mass., on December 15, 1922, by Dr Charles A Drew, superintendent.

search for the solution, and stimulates them to take the necessary steps to put the schools on an educational basis, even though it takes money, the writer will not regard our difficulties as deplorable.

All classes of society in every community should be made to feel their responsibility for keeping our schools of nursing filled with the right kind of students. Surely all classes in the community need the services of nurses and all should help to provide an adequate supply.

If nursing schools were put upon the same plane as other educational institutions, we should see more daughters of the members of the medical profession and of the educated, cultivated, well-to-do members of our communities enter our schools.

The greatest handicap under which our schools are laboring today is not the lack of students, but the lack of well-equipped women as heads of schools and as assistants, teachers and supervisors. Will the lowering of educational requirements, reducing the age requirement to 17 and 18 years, shortening of the time, (if it means reducing the amount of nursing education given) tend to overcome this lack in the future? Is not our present condition largely due to the low standards, or lack of standards in the past?

University School in West

Our one outstanding method is advertising, both direct and indirect. By direct, is meant getting bulletins into the hands of young women who might as well be interested in nursing as in some other profession, and into the hands of such persons as are constantly giving informal vocational guidance to girls, and also by means of occasional reports of our activities in other publications. The indirect method includes everything else that we have done to make our students good nurses, happy and enthusiastic, so that they will advise their friends to take training with us.

We have never lowered our entrance requirement of a complete high school education.

A combined college and nursing course not only brings us many college women who are taking the five-year course, but many others who have had some college work or a complete college course with a major other than hygiene.

We have given the nurses the best course of instruction available, using the facilities of the medical school in many instances. Nursing books and magazines have been made a part of the medical school library and a small fiction library and fiction magazines have been placed in the nurses' residence.

The Alumnae Association is encouraged to meet in the nurses' residence and keep in close touch with the student body.

Our state law requires that student nurses work only forty-eight hours a week. Each nurse has one day each week from duty, though classes must be attended. Some of the work formerly done by students is now handled by orderlies and ward maids. We try to make the work of the nurse always training, never exploitation.

The standing committee of the school of nursing includes the head of the hygiene department and the dean of women of the university, the director of hospitals, a representative from the medical and surgical staffs of the medical school and hospitals, and five members of the nursing staff. Frequently, this group calls in others to help in formulating policies. This committee not only decides matters of policy, but handles any serious matters of discipline. Students-nurses seem to feel this a more just and impersonal method than when it was left to the administrative staff.

The health of the student-nurse is very carefully supervised by a regular infirmary staff.

A loan fund has been established for students in training.

Our nurses' residence is new and comfortable. It includes a recreation hall which is in constant use. We have a recreation supervisor who gave the students physical education, coached games, planned hikes and picnics with them and helped with parties. Food is sent from the hospital for the hikes, picnics and parties and is also furnished for evening lunches.

The nurses are encouraged to have interests outside of their work and their studies. Just at present the senior class is hard at work getting out the first "annual" of the school.

A self-government organization deals with the lives of the students when off duty. The students themselves impose the penalties for infringement of rules. In case of serious misconduct only, does the executive committee refer a student to the nursing committee for discipline. Just once in the three years we have had self-government has a student been so referred. In that case the executive committee recommended her dismissal and the nursing committee, after reviewing the case, acted on this recommendation. The students as well as the faculty are satisfied with student control and have no wish to return to the old system.

We have a very strong student Y. W. C. A. Though only about eighteen months old it already has a membership of 90 per cent of the student body. This organization has a program including religious, social, educational and physical activities. The "Big Sister" committee gets the names of all girls who are coming into training, writes to them, meets them at the train if they so wish, and makes them feel a little less strange as they come into their new work.

There is another side to this picture which in all fairness we ought to face. Almost everyone, who is conversant with the conditions in schools of nursing and the hospitals with which they are connected, knows how widely they vary, and knows of policies, pursued in some schools that are so short-sighted as to be almost suicidal, but a wider and more intimate knowledge of schools and nurses has impressed us with two distinct failures that are very striking, and, while limited to a small number of schools, reflect discredit on all.

Conserving the Health of Students

First is the failure to conserve the health of the student nurses. There is overwhelming testimony that some schools fail in this respect, and the price paid is the bitterest kind of criticism from all the friends, neighbors and acquaintances of the student who suffers a serious breakdown. There is general agreement that in cases of serious and acute illness student nurses are well cared for, and the highest type of medical and surgical skill is generously contributed by the attending staff of the hospital. But there also is general agreement that in some schools the doctrine of spartan endurance is taught so effectively that early symptoms which ought to serve as danger signals are ignored and the opportunity for preventive treatment is lost, with the consequence that many conditions are far advanced and consequently harder to treat by the time they are diagnosed.

Especially is this true in regard to the symptoms of tuberculosis in the incipient stage. Granted that these are elusive and not readily recognized, this makes it *more*, rather than *less* necessary that all the advances of modern science should be brought to bear in order to make the

diagnosis as early as possible. Yet anyone who knows the various sanatoriums for tuberculosis knows that there is always a fairly large number of nurses among the patients, and too many of them are students who have broken down during training, or just after completing training. The staggering fact is that these cases, are, all too often, far advanced, instead of having been sent for treatment earlier. This ought not to be. If the physical examination at entrance serves any purpose at all, and if reasonable safeguards are thrown around the student nurse, and reasonable precautions taken, it ought to be possible to lessen the incidence of such tragedies. The price paid by the victim is a heavy one, but even greater is the price paid by the community, because one such case deters—who can say how many other young women—from entering nursing schools. It is hard to convince parents who know of such instances that in good schools of nursing where proper precautions are taken young women are really safer than they would be in any other kind of school. Then too, the public does not discriminate and is apt to think that what happens in one school is likely to happen in all schools, and the resulting criticism affects the best as well as the poorest schools in our midst.

Our schools should profit by the work of nutrition experts during the last few years. Why not have in every school, a *class* for undernourished nurses, students and graduates? Such a class would be of double value. It would form a splendid demonstration of health teaching and positive health, while bringing nurses up to standard physically. Just as in some schools, no child can graduate, who has not had all removable defects corrected, so here no student should advance from class to class, from service to service, without showing a clean bill of health.

Instead of making the young nurse, who is forced to have tonsils removed after frequent attacks of tonsillitis feel that she is an offender, enthuse a little of the same spirit into her that the school nurse uses to inspire her charges. Health classes for nurses in training, with positive health information directed toward the building up of proper health habits, would eliminate the tragedy and disgrace of the removal to a tuberculosis sanatorium of a student nurse about to graduate from a three years' course. From the standpoint of constructive publicity alone, our hospital training schools should take pride in graduating young women who are perfect exponents of health and the value of health teaching.

Misleading Advertisements

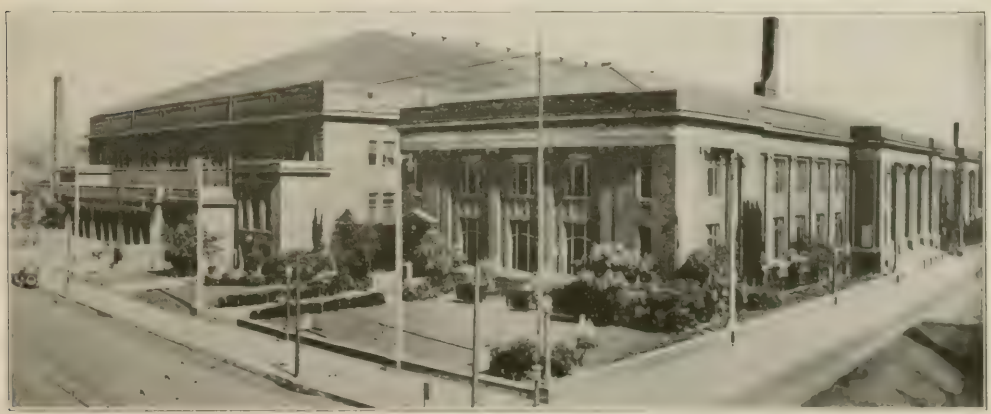
The second failure is in connection with some of our present methods of advertising. It is difficult to put into words the feelings aroused by some of the forms of advertising that schools of nursing are practicing today. One wonders whether in a desire to break away from our former conservatism, the pendulum has not swung too far, and resulted in a failure to carry over ethical principles into this new field.

A study of the circulars of schools of nursing furnishes many surprises. Presumably the purpose of such circulars is to furnish information regarding the educational opportunities offered the students. Yet it is not unusual to find the description of classwork and hospital services crowded into very small compass, in order to make room for descriptions of recreational opportunities, dances, etc. Some circulars suggest the advertising done by summer hotels, rather than the catalogues of colleges. Whether this is right is a pertinent question. With which group do we propose to align our schools, those whose advertisements are misleading, or those whose advertising is as honest and straightforward as it is possible to make it. In any event, is it not true, that advertising is only a temporary expedient, and really means a waste of money, unless hand in hand with it we strive to make our schools so good that they will attract students on their own merits?

After all, our efforts are not to secure a large class for one or two years *only*, but rather to develop an intelligent and sympathetic public opinion toward the problems of the hospitals and schools of nursing. Will misleading advertisements do this?

"The art of fine living consists of the greatest intellectual development and the most worthy social service possible, without loss of power to continue the race adequately, to enjoy life fully and to be a real source of happiness to others."—Dr. J. F. Williams.

WHERE AMERICAN HOSPITAL ASSOCIATION WILL CONVENE NEXT OCTOBER



The Milwaukee Auditorium, at Milwaukee, Wis., where the twenty-fifth annual conference of the American Hospital Association will be held, is one of the largest and most conveniently arranged auditoriums in the country. It provides facilities for large mass meetings and for small session conferences as well. The convention will be held the week of October 29.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

DIET IN INSTITUTIONAL CONVALESCENCE

By PAULINE G. KIRSCHENBAUM, Dietitian, The Burke Foundation, White Plains, N. Y.

THE following study is based upon the care of 35,000 patients of nearly all diagnoses and races, over a period of seven years. Group convalescent feeding presents many special problems in dietetics because these persons as received are nearly all neurotic in varying degree, they come directly from the stage of much food particularizing and pampering, food-fears and prohibitions and invalid habits are intrenched and being carried too far into the recuperative stage, laxatives and other gastro-intestinal medications have been used frequently for weeks previously, the racial, family and other diet peculiarities have become more firmly fixed; and yet good convalescent-therapy (which is at its best preponderantly mental, habit and courage therapy) depends upon normalizing and re-socializing in the quickest way.

Dietary normalizing is a main element in this composite of sound convalescent procedure. "I can eat regular food and I can walk," summarizes the standard expressions that indicate the turn to health. It proves in practice difficult to correct the various psychoneurotic border states of these patients until saner diet attitudes and practices are attained.

The Burke Foundation took from the outset a firm and somewhat radical position on this phase of the reconstructive effort. Criticisms, outside and in, and withdrawals, were prevalent at first. At the end of a year our "food troubles" (medical, neurotic, racial, religious, etc.) were over. Most new arrivals yet express or feel disappointment and doubt in their first experience of the "simple low meat, egg and milk" meals; but the understanding that it has all been broadly and scientifically considered and will not be changed, and that their predecessors speak so well of it soon wins them to cooperation and to well-nigh uniform enthusiasm finally.

Preceding the further detailed discussion there may best be presented the general study and precise calculations of this convalescent home's regular diet, as made by Miss Margaret R. Sandels of Columbia University (under the F. K. Sturgis Research Fund), with complementary data generously loaned by an outside source.

Diet of the Burke Foundation

(Report for one week)

The data compiled here were submitted by the Burke Foundation as a complete record of food eaten by patients and employes during a period of seven consecutive days from February 13 to February 19, 1922, inclusive. The same menus were served to these two groups.

The diet of the Burke Foundation is planned to meet the needs of persons convalescent after illnesses of various kinds, in the attempt to bridge the gap between the close supervision of the hospital and the unsupervised choice of the home. The diet furnished, it is believed, should be liberal in its content of calories, mineral elements, and vitamins, and should contain protein adequate in kind and amount; it should be easily digested, and mildly laxative. All this must be offered in meals which will be normal in appearance, and which will give satisfaction to persons of varying races, ailments, ages, tastes and home environments.

The menus seem, in the main, to meet these conditions successfully. There are relatively few "made" dishes, and unusual combinations and seasonings have been avoided. The general simplicity makes the meals acceptable to a greater variety of persons, aside from the value in promoting easy digestion.

Most of the desserts consist of simple puddings or of fruit. The cake used is not overly rich or heavily iced. It should be remembered, however, that the texture of a loaf cake makes it less easy of digestion than would be the same materials made up into crisp cookies requiring more thorough mastication.

Concessions to the popular taste have been made in the serving of pie occasionally, and in the regular use of tea and coffee. It is interesting to note that the latter have, in their preparation, been made carriers of considerable amounts of milk. At least one warm dish is desirable at each meal. The thick bean soup used at supper is an excellent example of such a dish, being generally well-liked and offering considerable nourishment in easily digested form. It possesses distinct advantages over the cheese and potato salad substituted for it in the "cold supper" on Sunday night.

Calculations for the diet have been made by the method of A. R. Rose as reported in THE MODERN HOSPITAL, Vol. 14, No. 6, 1920, under the title of "Abridged Dietary Calculations of Rations in Quantity." A few items which do not fit into this scheme were calculated separately, from figures obtained from Bulletin 28 of the Department of Agriculture. These items were (1) cooked spinach, (2) tomato puree (calculated as tomato soup), (3) tomato catsup, (4) apple pie.

The census of patients has been estimated in the following manner. On the assumption that the employes, at moderate activity, would consume a larger amount of food per capita than would the average patient, it seemed ad-

visable to weight the number of employes, counting each employe as equivalent, in terms of food eaten, to 1.25 patients. This seemed a conservative estimate. Using these figures, 90 employes per day would be equivalent to 90x1.25 or 112.5 patients per day. For seven days this would amount to 7x112.5 or 787.5 patients. Adding this latter figure to the census of patients, we may say that the food was divided among a company of persons roughly equivalent to 2726.5 patients. The figures will be found in Table I.

TABLE I. CENSUS OF PERSONS CONSUMING DIET.

	Patients	Employes (90)x1.25
Monday	269	112.5
Tuesday	279	112.5
Wednesday	276	112.5
Thursday	278	112.5
Friday	277	112.5
Saturday	280	112.5
Sunday	280	112.5
Totals	1939	787.5
Grand total of persons, expressed as patients		2726.5

The calculations for the diet as a whole, and the allowance per patient are given in the accompanying tables. Table II presents totals. Detailed calculations will be furnished on request.

TABLE II. TOTAL CALORIES, PROTEIN AND FAT FURNISHED BY THE DIET.

Name of Class	Total Calories	Protein Calories	Fat Calories
I. Cereals and cereal products	2,825,938	356,308	266,829
II. Dried legumes	379,660	70,800	12,390
III. Vegetables and fruits	1,686,323	167,371	.....
IV. Sugar, syrups, etc.	1,256,625	.....	.....
V. Fats and oils	1,373,750	.....	1,373,750
VI. Foods rich in fat and protein	1,079,348	202,290	551,120
VII. Animal foods exclusive of whole milk and fats	710,364	268,620	420,350
Totals	9,212,008	1,065,389	2,628,439
Per patient	3,378.5		
Percentage distribution of calories		11.57%	28.50%

The calories are furnished generously, and the distribution of these among the different foodstuffs is within normal limits. The protein furnishes 11.57 per cent of the total calories, or almost 98 grams per patient per day. Of this 44.2 per cent comes from animal sources. The fat gives 28.50 per cent of the calories, quite enough for palatability, not too high to be consistent with a normal rate of digestion.

No attempt has been made to study in detail the return of the diet in mineral elements, because it has seemed more practicable to estimate the adequacy of the diet through a study of the foods which may be expected to safeguard the diet in this respect. As regards *vitamins, our knowledge is still too incomplete* to warrant any attempt to speak in quantitative terms, and all we can do is to see that the foods known to be good sources of the three vitamins be given sufficient prominence in the diet.

A simple method for estimating the value of the diet as a whole is that of grouping the food materials used into certain related classes, and finding the relative prominence of each type. The nutritional significance of these groupings is summarized by Sherman and Smith*:

I. Grain products economical sources of energy and protein but not satisfactory in their mineral and vitamin content.

II. Sugars and fats chiefly significant from the nutritional standpoint as supplementary sources of energy, although some animal fats are important sources of vitamin A.

III. Meats including fish and poultry rich in protein or fat or both, but, in general, showing the same mineral and vitamin deficiencies as do the grains.

IV. Fruits and vegetables varying greatly in their protein and energy values but very important as sources of mineral elements and vitamins.

V. Milk—important as a source of energy, protein, mineral elements and vitamins, and possessing unique efficiency as a growth-promoting food.

From this summary we see that *as milk, vegetables, and fruits are made more prominent, we tend to safeguard the diet in respect to its mineral and vitamin content;* that meats and grains alike need supplementing in regard to their mineral and vitamin content; and that sugars and pure fats are typical examples of one-sided foods.

Rigid economy may cause undue emphasis to be put upon cereal products, while the fondness of the average American for the flavors of sugars, fats, and meats may lead to a disproportionate use of one or another of these.

Classifying the present diet in approximately these groupings we find the distribution to be as given in Table III.

TABLE III. DISTRIBUTION OF CALORIES AMONG GROUPS OF FOOD MATERIALS.

Name of Class	% of Total Calories
I. Cereals and cereal products	30.68
II. Dried legumes	3.04
III. Vegetables and fruits	18.36
IV. Sugars, sirups, etc.	13.64
V. Fats and oils	14.91
VI. Milk (exclusive of cream and cheese)	11.72
VII. Animal foods (exclusive of milk and fats)	7.71

The proportion of cereals is conservative; 25 per cent—50 per cent of the diet may come from cereals, but with the higher proportion it becomes difficult to make the diet palatable, and to furnish minerals and vitamins in adequate amount.

The proportion of meat is commendably low.

The three per cent of legumes used is probably as much as can be made acceptable in the diet, if we judge from experience with army rations.

The percentage of fruits and vegetables is very good. It has been recommended that at least 15 per cent of the total calories shall come from this group, and in the present instance we have 18.36 per cent, exclusive of the dried legumes.

The amount of sugar might be reduced slightly, as more than 10 per cent of the calories from this source may tend to unbalance the diet.

Market List†

(Burke Foundation Diet for One Week)

Cereals and cereal products		Raisins	5 lbs.
Barley	5 lbs.	Spinach, cooked	120 "
Bread	1187 "	String beans	39 "
Cake	220 "	Tomatoes	234 "
Flour	12.5 "	*Sugars, syrups, and starches*	
Hominy	42 "	Karo	70 "
Muffins, corn	173 "	Molasses	9.5 "
Muffins, wheat	86 "	Sugar	614.5 "
Noodles	15 "	Tapioca	24 "
Oatmeal	56 "	*Fats and oils*	
Pie, apple	118 "	Butter	249 "
Rice	10 "	Cream	5 qts
Rolls	265 "	Mayonnaise	6 "
Spaghetti	29 "	Oil	208.5 lbs.
Dried legumes		Salt pork	31 "
Pea beans	165 "	*Foods rich in fat and protein*	
Split peas	51 "	Chocolate	2 "
Fruits and vegetables		Cocoa	35 "
Beets	213 "	Milk, evaporated	18 "
Cabbage	210 "	Milk, whole	2000 "
Carrot	60 "	*Animal products, exclusive of whole milk and fats*	
Catsup	12.25 "		
Celery	140 "	Beef	180 "
Lamb, stewed	6.25 "	Cheese	20 "
Lettuce	85 "	Chicken	240 "
Onion	300 "	Corned beef	15 "
Parsnip	250 "	Egg	35.5 "
Peaches, canned	63 "	Fish	75 "
Pears, canned	63 "	Frankfurters	9 "
Peas, canned	240 "	Gelatin	7 ozs.
Pineapple, canned	50 "	Liver	5 lbs.
Potatoes	3629 "	Mutton	40 "

*Sherman and Smith, The Vitamins, p. 207.

†Report submitted by Margaret R. Sandels, Department of Nutrition, Teachers' College, Columbia University.

The quantity of *milk should be considered as somewhat below the optimum,* especially in the diet of convalescents. It is well to bear in mind that milk can make good the deficiencies of a diet to a greater extent than any other one food, and a liberal milk supply is our best single guarantee of an adequate diet.

Taken as a whole, the diet is excellent. The caloric value is high, and the protein is ample without being excessive. Good judgment has been shown in the liberal use of vegetables and fruits, and the milk supply, while not optimum, is above minimum limits. The diet bears witness to the thoughtful care of those responsible for it.

Specimen Menus for Winter

Monday
Breakfast, 7:30 a. m.—Cereal, eggs (men 2, women 1), rolls, coffee.
Dinner, 12:30 p. m.—Frankfurters, cabbage, potatoes, pudding, tea.
Supper, 5 p. m.—Soup, lyonnaise potatoes, lettuce, stewed fruit, cake, cocoa.

Tuesday
Breakfast—Stewed fruit, cereal, egg, corn muffins, coffee.
Dinner—Mutton stew with vegetables, potatoes, pudding, tea.
Supper—Soup, baked beans, celery, canned fruit, cake, cocoa.

Wednesday
Breakfast—Cereal, egg, rolls, coffee.
Dinner—Liver with onion sauce, buttered beets, potatoes, pudding, tea.
Supper—Soup, hashed brown potatoes, sliced onions, stewed fruit, cake, cocoa.

Thursday
Breakfast—Stewed fruit, cereal, egg, corn muffins, coffee.
Dinner—Hamburger steak with parsnips, potatoes, pudding, tea.
Supper—Soup, baked beans, lettuce, canned fruit, cake, cocoa.

Friday
Breakfast—Cereal, egg, rolls, coffee.
Dinner—Fish, stewed tomatoes, potatoes, pie, tea.
Supper—Soup, spaghetti, jardiner salad, stewed fruit, cake, cocoa.

Saturday
Breakfast—Stewed fruit, cereal, egg, corn muffins, coffee.
Dinner—Corned beef with cabbage, potatoes, pudding, tea.
Supper—Baked hash, beet salad, stewed fruit, cake, cocoa.

Sunday
Breakfast—Cereal, egg, rolls, coffee.
Dinner—Fricassee of chicken, dressing, peas, potatoes, ice cream, tea.
Supper—Cheese, potato salad, canned fruit, cake, cocoa.

Milk in cottages at 10 a. m. and at 3 and 7 p. m. to special patients.
Tray service to temporary bed patients, rarely.

Specimen Menus for Summer

Monday
Breakfast—Cereal, eggs, rolls, coffee.
Dinner—Corned beef, cabbage, potatoes, pudding, tea.
Supper—Hashed brown potatoes, salad, stewed fruit, cake, cocoa.

Tuesday
Breakfast—Stewed fruit, cereal, egg, corn muffins, coffee.
Dinner—Mutton stew with vegetables, potatoes, pudding, tea.
Supper—Spaghetti with tomato sauce, cheese, lettuce, canned fruit, cake, cocoa.

Wednesday
Breakfast—Cereal, egg, rolls, coffee.
Dinner—Roast beef, string beans, potatoes, ice cream, tea.
Supper—Lyonnaise potatoes, pepper hash, stewed fruit, cake, cocoa.

Thursday
Breakfast—Stewed fruit, cereal, egg, corn muffins, coffee.
Dinner—Hamburger steak, stewed corn, potatoes, pudding, tea.
Supper—Baked beans, lettuce, canned fruit, cake, cocoa.

Friday
Breakfast—Cereal, egg, rolls, coffee.
Dinner—Fish, potatoes, stewed tomatoes, pudding, tea.
Supper—Hashed brown potatoes, celery, stewed fruit, cake, cocoa.

Saturday
Breakfast—Stewed fruit, cereal, egg, corn muffins, coffee.
Dinner—Frankfurters, new cabbage, potatoes, pudding, tea.
Supper—Hash, lettuce, stewed rhubarb, cake, cocoa.

Sunday
Breakfast—Cereal, egg, bread and butter, coffee.
Dinner—Roast beef, potatoes, peas, ice cream, tea.
Supper—Cheese, potato salad, canned fruit, cake, cocoa.

Average Daily Consumption

The average daily consumption (patients and employes) of meat, butter, eggs and milk, at Burke Foundation during 1921 and 1922.

Meat, fowl and fish	.36 lbs.	per person per day
Eggs	1.41 eggs	per person per day
Milk	.60 qts.	per person per day
Butter	1.40 oz.	per person per day

There is presented, through the courtesy of Miss Alice Ellison, superintendent, the essentially year-round menu of Campbell Cottages, the 85-bed convalescent branch of New York Hospital. Ages range from 1 to 16. Their dietary is the admirable result of 16 years' experience of all kinds of children with every admissible ailment:

Children's Menu at Campbell Cottages

Monday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Chopped meat, vegetable, potato, bread and butter, tapioca pudding.
Supper—Soup, stewed fruit, bread and butter, cake, cocoa.

Tuesday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Beans, vegetable, potato, bread and butter, cottage pudding.
Supper—Rice and milk, bread and butter, stewed fruit, cake, cocoa.

Wednesday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Chopped meat, vegetable, potato, bread and butter, custard pudding.
Supper—Cream of wheat, bread and butter, jam, cake, cocoa.

Thursday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Pot roast, vegetable, potato, bread and butter, ice cream.
Supper—Soup, bread and butter, stewed fruit, cake, cocoa.

Friday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Creamed eggs, potato, bread and butter, rice pudding.
Supper—Rice, bread and butter, stewed fruit, cake, cocoa.

Saturday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Stew, vegetable, potato, bread and butter, corn starch.
Supper—Baked beans, bread and butter, stewed fruit, cake, cocoa.

Sunday
Breakfast—Cereal and milk, bread and butter, cocoa.
Dinner—Chopped meat, vegetable, potato, bread and butter, chocolate pudding.
Supper—Corn flakes, bread and butter, stewed fruit or jam, cake, cocoa.

Milk at 10 a. m., 3 p. m., 8 p. m. Fresh vegetables in season.
Special feeding and diets, as for diabetes, etc.
Eggnogs, s. o. s.
Children under six have milk at dinner.
Round steak is used for chopped meat and stew.

Methods and Results at the Foundation

Patients in all convalescent homes stay on the average only about three weeks, hence a *standardized weekly menu gives variety enough* to all. With us they walk (wheeled at times) some distance to dining rooms. Bed feeding is rare and is corrected and obviated by a partial starving test. Those saying they cannot eat the food or have no appetite are told to skip one or two meals, and are soon seen at table in hungry and digesting mood. No foods (or drinks or drugs) are allowed from outside sources, with the exception of fruits and candy. Food "grabbers" and gormands are repressed; clean-up of plates is taught; very little is discarded after the meal. (Garbage men have long declined to come for our little end-waste.) The width and flexibility of the menu allow use of the articles that are cheapest in season.

A moderate-sized piece of meat is served on the individual plate and no more may be had, and but two pieces of butter. Table oil is used freely not alone on salads but by the spoonful, where fattening is indicated. "All they want of the main vegetable" dishes and of bread is the keynote. Soups are not well taken in July and August and are discontinued but at other times they are made substantial calory carriers.

Potatoes Are Mainstay in Diet

Baked beans are served as principal dish twice weekly (except in July and August once only), are keenly relished and have, in this balance of diet, given practically no gastro-intestinal disturbances. About six instances of mild food-poisoning of groups has occurred, the faulty foods proving undeterminable as is so often the case. *Potatoes are the mainstay,* prepared in many ways. Syrup is kept on the tables and moderately used especially by the youths. Our farm provides more than one-third of all vegetables; patients help some in tillage and in kitchen preparation. Staff and employes are on essentially this same patients' diet, with slight appropriate graded modifications.

Drinking-milk is not given at table, but in the cottages at 10 a. m. to all, and at 3 p. m. again to some for special nutritional reasons. Milk constipates many, tends ever to get used by those needing it least, unless strictly admin-

istered, and has been "out of scale" here in cost during the past few years. A majority of convalescents have been given the old parrot-wise advice to "go to country and eat milk and eggs," and with many of this class there is good mental and physical therapy in holding to the wholesome everyday feeding as outlined above. More milk percentage is now again being gradually added here, especially for the younger and the seriously depleted, but only upon order and supervision. It is to be remembered in this connection that most of our patients are adult.

Special Dieting Not Practical

Special dieting, as such, is not practiced, and mainly because of the highly restorative anti-psychoneurotic values inherent in the broad dietary single standard. Doctors who were critical at first continue to send increasingly their gastric and intestinal ulcer cases to us (for a total now approaching 1500); the results must have been satisfactory. These patients are judged individually, given extra milk and cotton-seed oil and instructed to "pick and choose" at the table—to starve if need and report when having much gastric trouble. A few leave through food-fear and the obsession for particular or fancy dieting, but nearly all make excellent convalescence, under longer stay than average. This illustrates procedures in a few other classes requiring some modifications at first; e.g., hyperthyroid are somewhat forced-fed. The important mental therapy is accomplished by holding in the main to group cooperation. It is well recognized, however, that a certain field exists for modest special diet convalescent places, yet to be established.

Women consume only two-thirds as much food as men; growing boys even more than the men (in accord with all recent studies). The same food is served to these three classes; but occasionally, as when farm supplies come irregularly, the finer vegetable, e. g., goes to the woman's side. Certain likes of this sort may be catered to, especially in desserts.

Child convalescence has to meet with strong dietary peculiarities and aversions, varying with different localities, races, home influences, etc. Firmness, observation and experience soon work out child diets satisfactory to happiness, health and just economies. Parents give thanks for and are taught by this moulding of their children to simple saner dietaries, which goes quitely on in all convalescent places, and carries on into the homes.

Average *weight gain* at this home has been just under three pounds for men, and somewhat over two pounds for woman (average of stay about 19 days). While some gain in weight is generally a valuable sign of health progress and has pronounced good effect upon the patient's spirit, yet it is *not to be taken as the main index of recuperation.* Vital capacity, posture, weight, courage and mental attitude gains rightly make up the composite for judgment of fitness to resume work-and-play life. A purely fattening process may readily be carried on, of course, but it would not generally be good convalescence. A *considerable number should lose weight* during this period best to accomplish durable reconstructions.

Medical Phases of the Diet

The *correction of constipation* in thousands of cases under this routine has proved most remarkable. How much the other active rejuvenative elements of the regime have contributed to these happy results may not be precisely determined, but evidently in this and other like experiences the diet is at least one main factor. Many evidences of faulty digestion and food stasis also disappear. Laxative and digestive drugs are rarely given and only for pronounced symptoms. Talks on food values and home management are given to patients in assembly at intervals. Many women ask on leaving for menus and details of preparation. Information by letter and otherwise constantly comes back telling of the permanence of these results and expressing *gratefulness for knowledge of the healthier, cheaper diet being in some measure introduced at home.*

Daily Cost from 36-40 Cents

Many of the changes and simplifications in the dietary were made under pressure of forced war-time economies, and were retained when found to work well. Per capita meat consumption was cut 1-3 in 1917 and has since been further reduced to ½ the beginning figures. Early as 1916, a brown "war-bread" was devised made up of left-over bread, cake and cereals plus graham, bran and corn meal added to the wheat-loaf, "as much as it will stand." This proved so good that two loaves of it to one of white bread have been since demanded. The recipe for the "Burke bread" is frequently asked for.

Our daily *per capita food cost,* which rose for a brief war-crest period to seventy cents, is now running between thirty-six and forty cents. In making food cost comparisons of convalescent with other institutions it is to be remembered that the convalescent places feed a much smaller percentage of "help" (only one employe to three or four patients) and that the entire diet is essentially of staff grade, and constantly most generous in quantity to fill the marked depletions of this class of patients. Yet the tendency here is yet toward simplification and lowered costs, without reduction of dietary values, and with most important long-term influences upon the patients and households contacted in the very impressionable convalescent period.

NEWS ITEMS

Miss Sara McInnis has accepted a position at the Mayo Clinic. Miss McInnis was formerly at the Cleveland City Hospital, Cleveland, Ohio.

The Ohio Valley General Hospital at Wheeling, W. Va., was deprived of both its dietitians when Miss Hazel Lease accepted a position at Wesley Memorial Hospital, Atlanta, Ga., and Miss Alice Ferguson opened a tea room in St. Augustine, Fla.

Miss Esther Wright, formerly an assistant at Johns Hopkins has gone to Shreveport Charity Hospital, Shreveport, La., as dietitian.

Miss Lucile Hartman has been appointed second assistant on the staff of the dietary department of the Presbyterian Hospital, New York.

Dietitians have for some time associated Mrs. Agnes O'Dea with the dietary department of Johns Hopkins Hospital, but they must now think of her in connection with the new Fifth Avenue Hospital, New York. Mrs. O'Dea has chosen for her assistants Miss Dorothea Kroncke, University of Wisconsin, who took student training with her and later did some special metabolism work at Johns Hopkins, and Miss Dorothy Jones, Simmons College and Teachers College, who took student dietitian training at Mt. Sinai Hospital, New York.

Miss Bertha Hyde, who has been dietitian at Cincinnati General Hospital for a number of years, has given up her position and gone home for a rest.

Another dietitian who is taking a vacation and renewing acquaintance with her family is Miss Esther Nelson. She has been dietitian at Seaside Hospital, Long Beach, Cal., and her home is in Yankton, S. D.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

"EVERYTHING IN ITS PLACE"*

THE use of steel has been emphasized in both this and the preceding article as the most practical material to use in cabinet construction. There are valid reasons for this emphasis.

In the first place steel is better suited for the purpose. It is stronger and more durable; likewise it is more easily cleaned and kept clean, possessing fewer crevices and cracks for dirt and germs to lodge in. In the second place the manufacture of steel cabinets is more standardized, and thus permits of logical study. Wooden shelving, cupboards and cabinets for storage purposes are frequently built by the individual contractor or the house carpenter to meet the special requirements of each institution. While undoubtedly wood construction can be satisfactorily used in some of the instances enumerated in this series of articles, yet in every case it is safe to say that steel cabinet construction will be found superior in important respects.

Must Consider Length of Service

The cost of permanent and semi-permanent equipment of a hospital must be calculated on the basis of length of service, as well as initial cost. Specially constructed steel cabinets and shelving are obviously higher than similar construction in wood. The increase in use of steel construction, however, naturally has led to partial standardization and, with the broadened use of steel cabinet work, there will be a definite advance in this standardization. Standardization of shelves and storage cabinets does not mean the arbitrary establishment of certain fixed sizes which must be employed in every institution, but rather the adoption of unit sizes which permit the use of any desired multiple of the original units, thus meeting the size and space requirements of virtually every hospital. Architects, hospital consultants and others responsible for planning and designing new institutions are familiar with these unit sizes and plan definite storage space so as to employ stock sizes.

This is particularly well exemplified in the modern clothes locker with which probably every hospital superintendent is familiar. The modern commercial locker is of comparatively recent development and typifies the remarkable progress that has been made in economical and efficient metal working. Such lockers are of standardized construction throughout. It is true that a variety of sizes are available and the lockers may be secured in either single, double or triple tiers, or double and single row construction, yet all of these variations in design and size are part of a definite program of standardized construction which every successful manufacturer follows. The modern locker can be furnished either set up or "K. D.," to be erected on the premises. The sides, doors, backs, tops and shelves are each made independently, yet fit together into a rigid, firmly constructed piece of equipment. Inequali-

*The second article of a series on cabinet construction, the first of which was published in the January issue.

Fig. 1.
Staff locker room, operating pavilion, Cincinnati General Hospital.

Fig. 2.
Lockers in surgical dressing room, Fifth Avenue Hospital, New York.

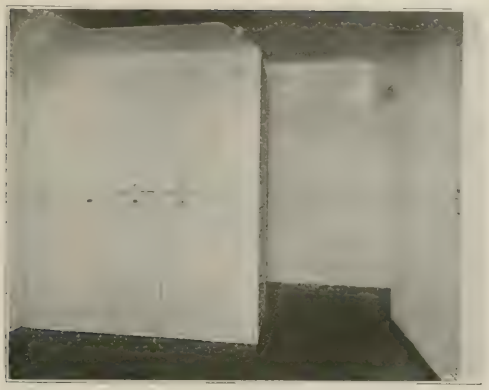


Fig. 3.
Employes' locker room, Fifth Avenue Hospital.

ties in the floor are overcome by adjustable legs. The use of mammoth presses in forming the various parts permits the use of lighter gauge metal in which necessary rigidity and strength are given by angle reinforcements or by the bending and grooving of the sheet steel.

Fig. 4.
Locker wardrobe in private rooms, Fifth Avenue Hospital.

Sectional Locker Wardrobes

No better comparison of the economy that has been secured in steel cabinet construction can be made than through a comparison of the modern sectional locker with the locker wardrobes manufactured by makers of steel hospital furniture. In the latter case the wardrobe is constructed complete and as an individual piece. Without the use of forming presses a heavier gauge steel is, as a rule, employed and this is riveted or welded to the substantial skeleton frame. Because of the far greater amount of labor and the increased cost of material, the hospital furniture manufacturer must ask considerably more for such a wardrobe locker than the price secured by the regular locker manufacturer. Yet, from the standpoint of service, the commercial locker meets the requirements of the institution in every way, and while not equal to the locker wardrobe of the hospital furniture design in point of detailed quality, yet from the standpoint of use and purpose it is fully as satisfactory.

One of the ever-present problems in the hospital is the storage of wearing apparel belonging to patient, staff and general employe. In the more modern institutions the old-fashioned cloakroom is a thing of the past and with the

Fig. 5.
Storage of ward patients' clothes, Cincinnati General Hospital.

Fig. 6.
Safe cabinet, Fifth Avenue Hospital.

installation of modern lockers the wearing apparel of staff and employes is kept more securely and in better condition in individually locked wardrobes.

In Fig. 1, the general type of sectional locker is shown, this being of the single tier type. In Fig. 2 provision has been made for the lockers in the design of the building, and while of the ordinary commercial type they are recessed with cove base extending to the bottom of the locker.

The use of double tier lockers, while naturally limiting the available space in each, permits of considerable economy in floor space. Double tier lockers have been employed in the Fifth Avenue Hospital, New York, for the use of employes living outside the hospital. These lockers represent a permanent installation, partially recessed and with sanitary cove base.

The care of patients' wearing apparel presents a more difficult problem in the general hospital. In the case of private room patients the installation of wardrobes and

lockers solves the question. The types of recessed lockers as employed in the Mount Sinai Hospital, New York, were illustrated in the January article. In the Fifth Avenue Hospital a built-in locker-wardrobe has been installed in the various private rooms.

In the case of ward patients the problem has not yet been satisfactorily solved. In some hospitals combination locker-tables are installed and kept at the bedside of each patient; some keep the patients' clothing in compartment shelves; some, as shown in Fig. 5, put it into a suitable bag or sack and suspend it from properly designed racks. In other institution hangers are provided with covers which when filled are raised to the ceiling by means of pulley and cord.

A number of progressive hospital administrators believe that the use of individual lockers represent the solution of this question. Double tier lockers such as shown in Fig. 3 would appear to be suitable for this purpose and should enable wearing apparel and other belongings of ward patients to be securely stored in a clean and sanitary condition and yet be readily available when desired. The fact that these lockers can be locked individually (although masterkeyed as a rule) prevents the loss or misplacement of patients' belongings, which unfortunately sometimes occurs. There promises to be a marked development in this direction in the planning and equipment of projected institutions.

Fig. 7.
Linen storeroom, Henry Ford Hospital, Detroit.

Care of Money and Valuables

Another problem which is frequently encountered is the proper care of money and valuables belonging to patients. While this is ordinarily taken care of by members of the family there are frequently instances where patients, particularly emergency cases, are brought to the hospital with money and jewelry of considerable value. On each floor in the Fifth Avenue hospital is a properly designed safe-cabinet which permits of the temporary storage of patients' valuables, particularly in cases of patients admitted during the night. A main vault has been provided in this hospital in which such valuables are regularly kept. The storage cabinet shown in Fig. 6 also is used for storing necessary supplies of brandy, whisky and opiates. In a number of hospitals the problem of keeping valuables has been met by the installation of what might be termed safe deposit boxes, similar to those employed in bath houses and in safety deposit vaults. In this plan each patient is given an individually locked container.

Fig. 8.
Linen storeroom, Cincinnati General Hospital.

Fig. 9.
A section of a hospital's linen room.

Fine points count in the long run

(The Superintendent and the Surgical Nurse were talking. Series VIII.)

"Well, I have done as you suggested —ordered a new instrument sterilizer for the surgery. It will be here in a week and it has all those things you wanted —foot pedal raises cover and tray at the same time; instruments drain, and it takes only a trip of the pedal to lower."

"Fine, Doctor. There will be joy here now. I only hope it will stay fine."

"Yes. It is different from anything I have ever seen—solid and substantial. Weight of the tray is carried at both sides—no racking the cover, you see."

"Before you go, Doctor, how about re-painting the Sterilizer room?"

"Yes we shall. The paint will stay on now. There is a vent connection on the new sterilizer—carries off the steam and there is a water filling valve, and a drain with a big screen—keeps sediment from clogging the pipe."

"Who makes this wonderful sterilizer, Doctor?"

"Why it's the Castle, that we've heard so much about recently. They say they build sterilizers that do what is wanted of them and I guess they're truthful and besides, their prices are reasonable."

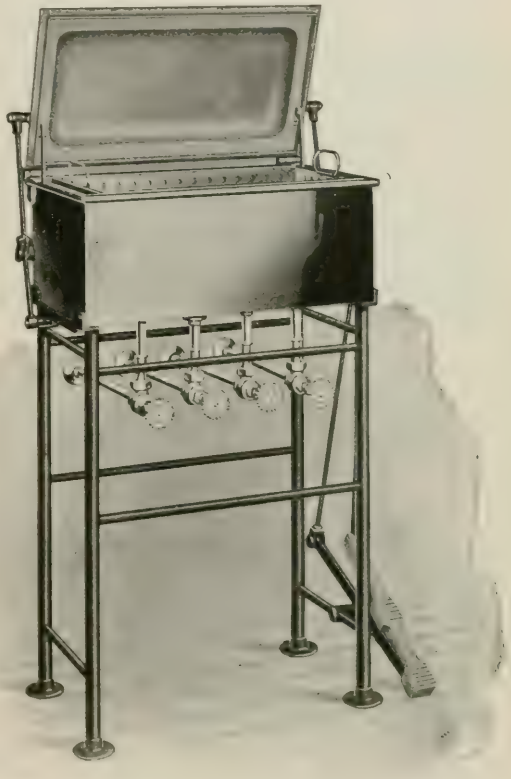


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Fig. 10.
Food storage room, Henry Ford Hospital, Detroit.

Proper storage of hospital linens is frequently neglected. This neglect arises from the lack of proper storage facilities and from improper organization. Unless proper plans and facilities are provided, it is almost impossible to keep the linen supplies in clean and presentable shape. Under such conditions it is increasingly difficult to maintain proper stock and inventory records. A simple plan of organization, accompanied by ample and properly designed storage facilities, greatly facilitates the handling and care of these important supplies.

One of the most convenient linen storage rooms that has come to our attention is that employed in the Henry Ford Hospital, Detroit, which is shown in Fig. 7. Not only have well designed storage cabinets been installed there, but they are provided with doors, insuring a clean and perfect condition of stock. It is obvious also that the orderly arrangement of these shelves provides a constant incentive towards neatness on the part of employes. It is to be particularly noted that while this installation was not made on a unit basis it naturally divides itself into distinctive units of double-door top and base cupboards. The greater depth of the lower cupboard space provides a work shelf especially convenient in the storing and removing of current supplies. This type of cabinet is particularly recommended for the purpose and is being used in a considerable number of institutions.

Fig. 11.
Supply closet and blanket warmer, Chicago Lying-In Hospital.

Fig. 12.
Built-in cabinet, utility room, Fifth Avenue Hospital.

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400 Knox Ave. Johnstown, N. Y.

"Always the Highest Quality"

Fig. 13.
Food and supply locker in nurses' work room, Cincinnati General Hospital.

In other hospitals an open type of skeleton shelves is employed. These shelves are made of tubular steel construction and offer the advantage of possibly greater sanitation, as every part of the storage space is directly accessible for cleaning with the minimum number of crevices and corners in which dirt may lodge. A disadvantage is the difficulty of orderly storage. Attention is called to the canvas covers over the top of each stack to prevent dust falling on the various supplies. (Fig. 8.)

A similar type of storage installation is shown in Fig. 9 and is particularly applicable in the larger institutions where great quantities of linen supplies are handled each day.

Food Storage

Storage of foods is an important problem in every hospital, since food supplies must be readily accessible, and kept in a clean, sanitary and orderly condition. Fig 10 shows part of the food storage room at the Henry Ford Hospital. This installation is a combination of bins, drawers, cupboard space and shelving, meeting the requirements of every type of food product or container. Shelves are adjustable so as to accommodate varied quantities and various-sized containers. The tilting bins are particularly convenient; the cupboard space with sliding doors provides for bulk storage. It is interesting again to note that the unit plan of construction, while probably not followed in this particular installation, is readily possible and enables the smaller hospital to purchase sections meeting their individual requirements without going to the expense of specially constructed cabinets. A number of manufacturing houses now make sectional units for similar storage room purposes, meeting every institutional requirement. In some instances these units are sectional in height as well as length, permitting the placing of proper shelf units on the top of cupboard and bin bases, much like sectional bookcases are assembled.

Fig. 14.
Supply cabinet, Cook County Psychopathic Hospital, Chicago.

Surgical dressings and the thousand and one items that are used on every floor of the hospital call for adequate storage space. The range of style and designs of such storage cabinets is naturally great, yet readily permits of certain standardization or sectional construction. Frequently these storage spaces are recessed or built in, provision having thus been made in the original building plan. In Fig. 11 not only are the supply cabinets recessed, but this same unit includes a blanket warmer. This particular installation of supply closets and blanket warmer is located between two delivery rooms in the Chicago Lying-In Hospital; the convenience of this arrangement is obvious. Another type of recessed cabinet is that employed in the utility room of the Fifth Avenue Hospital, New York. This is recessed but is of standard construction.

The use of stock units is frequently employed to good advantage. In Fig. 13 is shown an installation of three separate cabinets. They are the ordinary commercial type of storage cabinet fitted with adjustable feet and in this instance finished in white

Fig. 15.
Supply storeroom, Henry Ford Hospital.

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Fig. 16.
Utility room, Mary Imogene Bassett Hospital, Cooperstown, N. Y.

enamel. These cabinets are employed for the storage of surgical dressings, bandages and other supplies.

Frequently these storage cabinets are made with glass doors; this is a very desirable feature, since it insures neatness in storage. They are shown in Fig. 14.

In many of the larger hospitals storage of dressings and similar supplies is standardized at least on each floor. In the Henry Ford Hospital the same general type of cabinet has been employed as is used in linen storage. Both upper and lower cupboard space is provided with glass doors. This is a specially built-in installation, but it is obvious that the design would permit the use of sectional units.

Utility cabinets are not always large, cumbersome affairs. Frequently there is need for compact, conveniently located cabinets for the storage of important supplies. This is well evidenced in Fig. 16.

Cabinet Space in Hospital Pharmacy

The hospital pharmacy has need of specially designed shelving and cabinet space. There are splendid drug cabinets and pharmacy equipment made of wood, but our attention being directed particularly to steel equipment prevents extended consideration of wood cabinets in this article. Two types of recessed and built-in pharmacy and dispensary equipment are shown in Figs. 17 and 18. Both are especially designed to meet space and service requirements in the respective institutions and both provide ample shelf or table room for dispensing purposes.

A preceding article illustrated one type of recessed instrument cabinet. Another style is shown in Fig. 19. These are installed in the corridor walls in close proximity to the operating, sterilizing and service rooms. The photograph well illustrates the advance of recessed construction and the possibilities of this sanitary, convenient arrangement.

Fig. 17.
Pharmacy cabinets, Illinois Central Hospital, Chicago.

Cabinets at Nurses' Stations

In every hospital there is need for ward and floor cabinets at nurses' stations for the storage of drugs, medicinal preparations, dressing supplies, etc. To install such cabinets without interfering with corridor space and at the same time to provide necessary service convenience is always a problem. In later institutions this is accomplished by recessing the cabinet in the wall. This permits of ready accessibility of supplies without utilizing corridor space. The inclusion of water supply and basin in the cabinet shown is of distinct value. As will be noted the glass shelves are adjustable and accommodate any sized container.

It would be impossible to show the many varied types of steel cabinets used in diet kitchens. The convenience of sanitary steel construction with ample and scientifically arranged storage space in diet and service kitchens is readily recognized. There is no need for specially designed cabinets for this purpose, as stock units are

Fig. 18.
Dispensary equipment, Cook County Psychopathic Hospital, Chicago.

Fig. 19.
Recessed instrument cabinets, Sarah Morris Hospital, Chicago.

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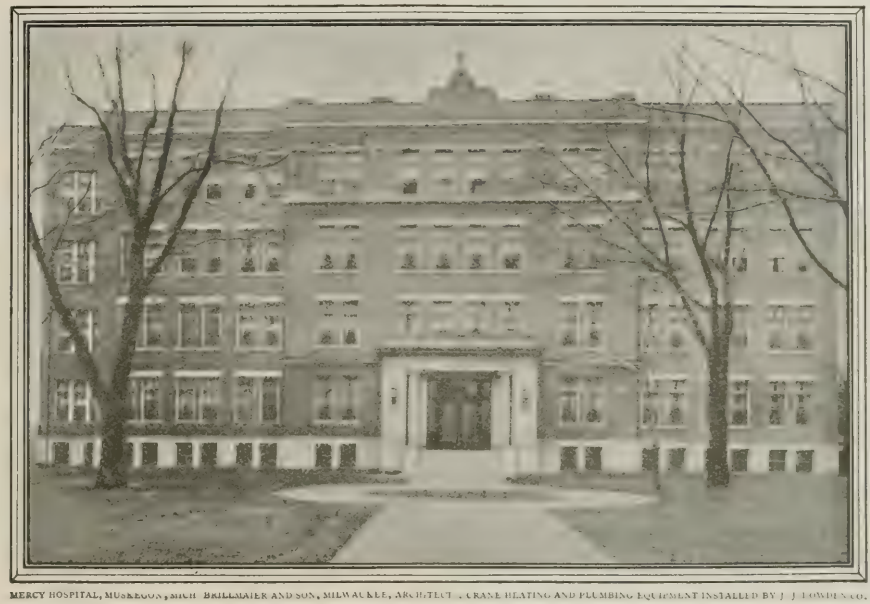

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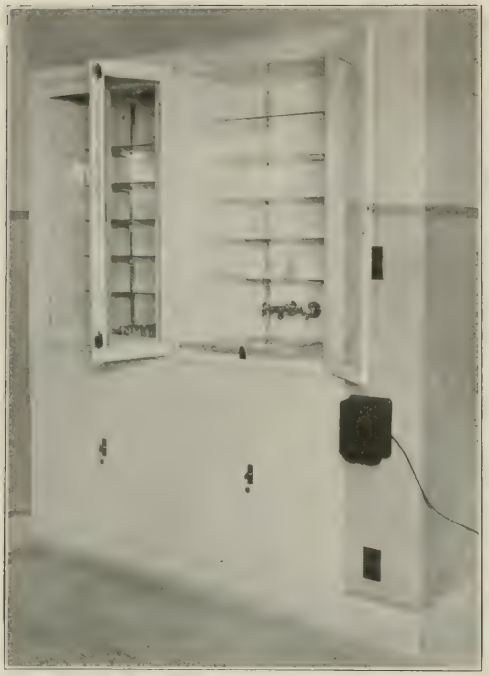

Fig. 20.
Nurses' station cabinet, Illinois Central Hospital, Chicago.

Fig. 21.
Diet kitchen, Mary Imogene Bassett Hospital.

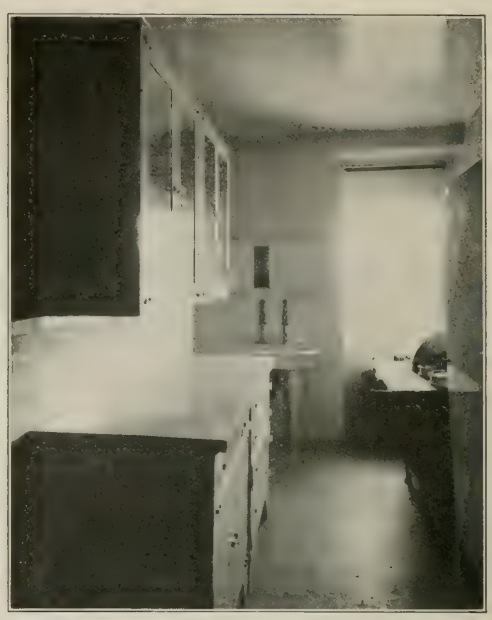

Fig. 22.
Another convenient installation in the Mary Imogene Bassett Hospital.

thoroughly suitable. In Fig. 21 is shown a typical installation with wall cabinet permanently attached and with separate cupboard-table unit.

Fig. 22 shows a similar installation which consists of two wall cabinets and a double unit floor cabinet. Both are finished in white enamel.

The purpose of this article has not been to describe particular installations as much as to emphasize the convenience and practicability of scientfically planned and constructed storage units throughout the hospital for the benefit of those planning new institutions and for administrators of established hospitals.

Much can be accomplished by hospital architects and superintendents, in cooperation with manufacturers of this equipment, in defining various units, partially standardized in size, at least, so as to permit the purchase of these unit sections in such combinations as to meet existing requirements in any institution. Such nominal standardization will result in great economy to the hospital field through the saving of expense of specially constructed equipment.

"One who never turned his back, but marched breast forward;
Never doubted clouds would break,
Never dreamed, though right were worsted, wrong would triumph,
Held we fall to rise, are baffled to fight better, sleep to wake.
So, at noon day in the bustle of man's work-time,
Greet the unseen with a cheer!
Bid him forward, breast and back as either should be,
'Strive and thrive!' Cry, 'Speed, fight on, forever, there as here.'"

—R. Browning.

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DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary Committee on Dispensary Development, United Hospital Fund of New York, and Chief, Service Bureau on Dispensaries and Community Relations of Hospitals, American Hospital Association, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association 370 Seventh Avenue, New York

TENTATIVE STANDARDS IN ORGANIZATION AND MANAGEMENT OF OUT-PATIENT DEPARTMENTS

WITH THE INTRODUCTORY STATEMENT OF ALEXANDER LAMBERT, M.D., CHAIRMAN, EXECUTIVE COMMITTEE, ASSOCIATED OUT-PATIENT CLINICS OF THE CITY OF NEW YORK.

These standards, tentatively drawn up by the executive committee for comment and criticism by physicians, trustees, hospital superintendents and others in New York City, are printed in THE MODERN HOSPITAL at the suggestion of the Associated Out-Patient Clinics, comment and criticism upon them being greatly desired. Such should be sent to Michael M. Davis, Jr., executive secretary, Associated Out-Patient Clinics, 15 West 43rd Street, New York, N. Y.

WE ALL realize that hospitals are institutions which must care for the sick of those families who cannot afford to give as good care in their homes as they can obtain in the hospitals or must care for those who are utterly unable to provide for sickness when it occurs as a calamity in their existence. But must we not look upon the out-patient department, not as an adjunct to feed the hospital and supply material to the hospital beds, but as the connecting link between the community and the hospital, as that portion of the hospital which cares for the sick in their early stages of functional sickness, a place in which they will receive care for their illness before they are so sick that they must return to the hospital and ask for a place in which to lie down and go through their period of incapacity?

In other words, must we not rearrange our present point of view of considering the out-patient department as a mere adjunct of the hospital, to the realization that in the development of the out-patient department lies the real problem today for the growth and improvement of hospital function in its relation to the community? Is not the out-patient department the real connecting link between the hospital and the community and the proper channel through which all the service of the hospital should enter? This seems to your executive committee the real center of its problem, and this it seems is the point of view from which the general standards which have been sent to you should be viewed.

Relation Between Trustees and Medical Staff

The executive committee brings these standards before you for consideration, asking you how best they can bring about their consideration and acceptance by boards of trustees and by medical boards, and their general adoption throughout the city of New York as the standards to be considered and the standards to which all will endeavor to conform. We realize that this brings into consideration a more definite conception in the community of the real relation between trustees and medical boards, and the administrative and technical sides of the hospitals than at present exists. We realize that before the law the trustees are responsible for all things occurring in the hospitals, and we realize that without their generous aid and their interest hospitals cannot exist, because they are the ones who are responsible for the maintenance and the income for the running of the institution, and they are responsible before the law and the public for the persons they permit in the hospitals to give the medical and surgical care to the sick. There must be some authority to decide this, and in the sight of the law it rests upon the trustees. This association has also endeavored to emphasize the fact that the administration in the hospital expressed by the superintendent is necessarily the authoritative expression of the board of trustees, and all administrative and executive work must be vested in the superintendent and his authority be final in the matter; he being responsible only to the trustees.

There exists also the peculiar relation of the medical board to this vested authority. The medical board gives a technical service which cannot be given by anybody else, and the amount and excellence of that service rests in a great measure with the opportunities given its members to develop it. If they are curtailed in laboratory facilities, if they are curtailed in other technical facilities, their service to the sick is just so much diminished and the hospital fails in its duty toward the sick by just so much. The medical men should be held responsible for the way in which they seize upon their opportunities and the amount of use which they make of these opportunities to render their service; and, practically, success or failure in the service given by the hospital to the community rests upon the opportunities given the medical board of trustees, the manner in which they are given, and the manner in which these opportunities are fulfilled and developed. And at this point there is much opportunity at present for the development of clearer understandings and better appreciation of the function of both trustees and medical boards.

That the out-patient department is the real place for future development of usefulness in the hospitals and that it offers today the greatest opportunity for increased development is but little realized by either laymen or the medical profession, and your executive committee desires

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GLASS TUMBLERS

Mr. Hospital Superintendent:

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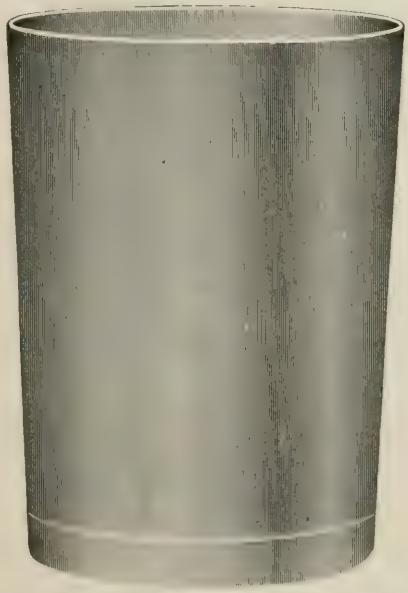
And when, in connection with this fact, you consider the many manifest advantages of glass, why hesitate as to the type of drinking vessel to use in your institution?



HAZEL ATLAS Tumblers are especially adapted for Hospital service; the glass itself from which they are made is of a texture that will enable you to sterilize the tumblers repeatedly for months without effect. In making the Tumblers a machine process is used by which the most durable ware ever turned out by the Glass Industry is produced. So that our Tumblers will stand up longest under the necessarily rough usage to which they are put in the ordinary every day work of an institution such as a Hospital.

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to bring forward this basic proposition for your consideration and asks for your active cooperation and aid in bringing about the realization of this fact in the community.

These general standards are, therefore, the general principles by which this may be brought about and are offered to you with the urgent request that they be considered from this point of view and be considered from every point of view by the boards of trustees represented in this association, and that the boards of trustees of each individual institution consult with their individual medical boards and discuss the pros and cons of the advisability of their application.

Standards for Out-Patient Clinics

Scope of responsibility of out-patient clinic.—It is the responsibility of an out-patient clinic to provide correct diagnosis and adequate treatment for ambulatory patients; to instruct its patients so as to assist in the prevention of disease; to aid in investigation of the causes of disease and of methods of treatment and prevention; and to provide educational facilities and useful experience for physicians, nurses, social workers, and others concerned with the care of the sick, or the promotion of health.

Community relations.—The out-patient clinic must comply with the dispensary law and the regulations of the state board of charities, the city department of health and other public authorities.

Those policies of out-patient service which affect private medical practice should be established and revised as necessary, in consultation with the medical profession of the community through appropriate representatives.

The out-patient clinic should cooperate with charitable societies and other agencies through examination of their beneficiaries and reporting the findings (under proper professional restrictions) to the societies interested.

General organization.—The board of trustees should have an out-patient committee or its equivalent. There should be an out-patient committee of the medical staff. There should be an executive head for the out-patient clinic, to whom all administrative personnel shall be responsible.

Relation to hospital.—The out-patient clinic furnishing diagnosis and treatment of the sick for more than special conditions or minor ailments should be affiliated with a hospital.

When an out-patient clinic is part of a hospital, the executive head of the out-patient department should be responsible to the superintendent of the institution.

Medical organization.—The professional staffs of the hospital and the out-patient department should constitute one organization, not separate staffs.

The director, or responsible head, of each service should be continuously in charge.

Each department of the out-patient clinic should have a chief who should be continuously responsible for carrying out the medical policies and maintaining the working standards of the clinic.

Adequate consultation facilities among the various departments (including refer and transfer of patients) should be available.

In order to promote coordinated medical work, the professional responsibility for each patient at any one time should be fixed upon a single department or physician.

Interns should be assigned a definite service in the clinic, under staff supervision.

Staff conferences for discussion of both ward and clinic cases should be held at regular intervals.

In the out-patient clinic the physician should be relieved as fully as possible of duties not directly concerned with the professional care of the patients. Such non-professional duties should be delegated to trained technical assistants—executive, nursing, social service, clerical, etc.; the number and assignment of such assistants depending upon the volume and the nature of the work.

Facilities, equipment and procedure.—Adequate facilities and equipment should be provided to make possible the satisfactory diagnosis and treatment of patients. The minimum facilities required in the way of space, equipment, conveniences for patients, and the best procedure within the clinic, will vary with the types of disease treated, and should be recommended by the various professional groups or sections of the Associated Out-Patient Clinics.

Admissions.—In determining the admission of individual cases to an out-patient clinic, three factors need to be considered; namely, the income of the patient or family, the size and responsibilities of the family according to a reasonable standard of living, and the character and probable cost of adequate medical treatment for the disease or condition found.

Each institution should formulate its own standards for the admission of patients, depending upon the kind of work done and the policy of the organization.

The gathering of social and financial information necessary to determine admission under the above policy should be performed by a person with training in social work.

Appointment System Recommended

Appointment system.—The admission of patients should be by appointment at a definite day and hour, as a measure conserving the time of physician and patient, and economizing with space and equipment. An appointment system should be devised by each out-patient clinic.

Limitation of numbers.—The number of patients admitted during a given session should be controlled in proportion to the facilities available in relation to space, equipment and personnel. Standards defining the maximum number of patients who should be seen by a physician during a given period should be outlined by the various professional groups or sections of the Associated Out-Patient Clinics.

Fees.—It is desirable that stated fees be charged patients for admission and that additional charges be made for medicine, appliances, and other special procedures or material.

Fees should be remitted in whole or in part to patients unable to pay, unless adequate treatment can be assured through reference of such patients to public agencies.

The fee list should be posted in appropriate places in the institution.

Records.—The medical records should be filed centrally. All the records of each patient should be filed together.

The records of the in-patient and the out-patient should be unified as completely as possible.

Records should not be carried or inspected by patients.

Definite responsibility should be fixed for the supervision of records as to completeness and as to proper care.

Standards for records should be outlined by the appropriate professional group or section of the Associated Out-Patient Clinics.

Social Service.—Social service in a hospital or out-patient clinic is for the purpose of aiding the physician in dealing with those factors in the personality and environment of patients which bear upon the medical situation.

The social service department should be an integral part of the institution.

The head worker or director of the department should

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be responsible to the chief executive of the institution.

There may be an auxiliary or advisory committee composed of lay persons interested in social work, and of members of the medical staff and board of trustees. If there is such a committee, the superintendent should be a member and the head of the social service department should meet with the committee ex officio.

Follow-up.—It is the responsibility of the out-patient clinic to endeavor to retain the patient under treatment until discharged by the physician.

It is the responsibility of the social service department what instructions shall be given patients, to indicate when patients should return, and the conditions under which delinquent patients shall be dropped, or be followed up by mail or by personal visit.

It is the responsibiltiy of the social service department to assist the physician in the instruction of patients, ascertain facts pertinent to their continuance of treatment, maintain an "expected return" index, review the records of patients, and after presentation of facts to the physician, to carry out or to supervise efforts to bring the patients back to treatment.

Results should be reported monthly.

A follow-up system may be applied to an entire out-patient clinic, or only to selected types of cases. It is preferable to employ a thorough follow-up system for a selected disease or group of diseases, rather than a partial or incomplete system to a larger group.

Accounting.—The financial accounts should show (a) the receipts from the various classes of fees for the out-patient clinic as a whole and for each section; (b) receipts from all other sources, as from endowments, public funds, etc., suitably classified; (c) expenses for the clinic as a whole and for each section, classified into the following divisions:

1. Medical payroll.
2. Non-medical payroll.
3. Supplies and material.
4. Overhead expenses.
5. New equipment.

Statistics.—A statistical report covering at least the following items should be made monthly and consolidated annually:

New applicants.
Number of new applicants admitted, classified by departments to which admitted.
Number of applicants rejected.
Total persons admitted, classified by departments to which admitted.
Total number of visits, classified by departments to which made.
Number of transfers and refers among departments.

Annual Report.—The annual report of the hospital should include a report on the out-patient clinic and this should contain (a) statistics, (b) financial facts, (c) a statement of past work and present problems, made by the medical staff, the superintendent, the board of trustees, or any or all of these authorities.

Limit Admissions to Given District

Districting.—It is desirable that each institution should limit admissions to patients residing within a definite area.

This should not prohibit teaching institutions from the admission of cases of importance from the standpoint of medical education, irrespective of residence.

Conference between representatives of institutions should be arranged for the cooperative determination of such areas, based upon the location and facilities of other institutions doing similar work.

Applicants at an out-patient clinic who are found to have been recently under treatment at another agency should, as a general rule, be referred back to that agency.

Adaptation of clinics to clientele.—Evening clinics for working people are desirable in most out-patient clinics.

Such special clinics should be established as meet the peculiar needs of the people or the district served.

Special effort should be made to enable the clinic to deal satisfactorily with persons not speaking English.

Appraisal of results.—There should be periodical surveys of the work of the clinics as a whole and of each section, for the appraisal of results and the improvement of methods.

CONFERENCE ON HOSPITAL SERVICE TO MEET IN MARCH

The annual congress on medical education, licensure, public health and hospitals will be held in the Florentine Room of the Congress Hotel in Chicago on Monday, Tuesday and Wednesday, March 5, 6 and 7, it is announced. The congress will be participated in by the American Conference on Hospital Service, the council of medical education and hospitals and the council on health and public instruction of the American Medical Association, the Federation of State Medical Boards, the Association of American Medical Colleges and the U. S. Public Health Service. One session as usual will be devoted purely to the discussion of hospital questions.

Tuesday afternoon the American Conference on Hospital Service will give the following program:

Introductory remarks by Dr. Frank Billings, president of the American Conference on Hospital Service.

"The Rôle of Non-Medical Clinical Assistants in Hospitals Without Interns," by Dr. S. S. Goldwater, director, and Dr. W. M. Bluestone, assistant director, Mount Sinai Hospital, New York.

"Liability of the Hospital for the Acts of its Servants," by John A. Lapp, director, department of social action, National Catholic Welfare Council, Chicago.

"The Relation of the State University Hospital to the Medical Profession," by Dr. C. P. Howard, professor of medicine, University of Iowa, Iowa City.

Annual report of the Hospital Library and Service Bureau, by the director, Miss Donelda R. Hamlin, Chicago.

On the first day, March 5, during the forenoon the Council on Medical Education and Hospitals, will present a program as follows.

Remarks by chairman, Dr. Arthur Dean Bevan, professor of surgery, Rush Medical College, Chicago.
Report of the secretary, Dr. N. P. Colwell, secretary of the council on medical education and hospitals, Chicago.
Report on investigation of graduate medical schools, Dr. Louis B. Wilson, director of the Mayo Foundation of Medical Education and Research, Rochester, Minn.
"The Medical Curriculum, Coordination of Courses to Increase Efficiency," Dr. E. Stanley Ryerson, secretary, University of Toronto faculty of Medicine, Toronto.
Nursing Education and Service. A report from a special committee of the council on medical education and hospitals, by the chairman, Dr. Robert W. Lovett, professor of orthopedic surgery, Harvard Medical School, Boston.

On Wednesday, March 7, during the forenoon the Council on Health and Public Instruction will present the following program:

Symposium: "The Medical Profession and the Laity":
(a) "From the Standpoint of the Layman," Dr. Walter Dill Scott, president of Northwestern University, Evanston, Ill.
(b) "From the Standpoint of the Health Officer," Dr. Watson S. Rankin, secretary of the North Carolina state board of health, Raleigh.
(c) "From the Standpoint of the Practitioner," Dr. Frederick C. Warnshuis, secretary of the Michigan State Medical Association, Grand Rapids.
(d) "From the Standpoint of the Board of Trustees of the American Medical Association," Dr. Frank Billings, Chicago.

On Wednesday afternoon the program given under the auspices of the U. S. Public Health Service will deal with: the education of sanitarians and the future of public health in the United States. A report of progress from the Committee of Fifteen appointed by Surgeon General Cumming of the United States Public Health Service at the Conference held in Washington, March 14, 1922 will be given. Tuesday evening the Federation of State Medical Boards will hold its annual dinner followed by its regular executive session.

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Co-Editors: LORING T. SWAIM, M.D., 372 Marlboro St., Boston Mass., and MISS MARY E. P. LOWNEY, Room 272, State House, Boston, Mass.

TREATMENT OF DISEASE BY EMPLOYMENT AT ST. ELIZABETH'S HOSPITAL*

APPLIED work is of undoubted advantage in the treatment of a psychotic case. Idleness is a great factor in the rapid deterioration of mental patients, the prevention of which may result in the patient becoming a useful institutional citizen, making an adjustment to the hospital level, even though he shows but little improvement from a psychiatric standpoint.

The primary object, especially in the introverted or thoroughly hospitalized patient, is to develop the habit of application. In these cases, the "product" of occupational therapy is the "effect upon the patient." To establish this habit the simplest occupations are used at St. Elizabeth's Hospital Washington, D. C., such as:—

Men—Winding roving, raveling burlap, sandpapering, tearing carpet rags and braiding them for rugs, hooked and braid rugs, plain basketry, weaving, and color work.

Women—Winding, tearing, and sewing carpet rags, color work, plain sewing raffia and pine needle work.

Greater Therapeutic Value in Useful Articles

The habit of application or willingness to work established, the patient is sent to an intermediate class. While in the primary classes and classes of very disturbed patients the "effect" upon the patient is considered sufficient "product"; such is not the case in the higher classes. It is now believed that what is worth doing at all is worth doing well, and that practical, well-made articles have a greater therapeutic value than a useless, poorly made article.

These classes have prescribed work, as follows:

Men—Hooked and knotted rugs, macrame, door mats, fly swatters, tying heddles, fancy basketry, plain weaving with special attention given to color combinations.

Women—Plain sewing and needle work, crocheting, color work, raffia basketry, weaving, petite point and sandal making.

The advanced ward classes do—

Men—Cord knotting (hammocks, tennis nets, basket ball nets), rake knitting, chair caning, rush seating, toy making, plain linen, Indian and rug weaving where design and color are emphasized.

Women—Crocheting, embroidery, plain sewing, linen, Indian and rug weaving, raffia and pine needle basketry and color work.

After leaving the ward classes, the patient's desires are given much weight in future assignment as his willingness to cooperate is a prime necessity. It has been found that markedly introverted patients, who could not be induced to work on the wards where there were many idle patients, have done very good work with improvement in dress, habits and behavior, when sent to a classroom in which everyone was employed.

Occupation Sometimes Destroys Delusions

In certain cases, the delusions of the patient have been made the prime consideration in assigning occupational therapy. For instance, one patient who believed that he was a great inventor—that he had invented a combination aeroplane and submarine—was sent to the shop and assigned a bench, tools and material. He was given several models of aeroplanes and told to make his models. About ten days later he stated to the doctor that the thing was all a mistake, that he wasn't an inventor and could not produce his aerial-submarine. He immediately discarded all his previous ideas in this direction and proceeded to make three original toys, which had a salable value.

The next step is shop work, as follows:

Men—Brush making, wheel pottery, willow basketry and willow ware (which is a continuation of reed basketry, as taught on the wards, and will lead to wicker furniture), advanced toy making and toy furniture (which leads to simple bench and cabinet work and wood turning), all kinds of plain and pattern weaving, such as rugs, carpets, linen towels, upholstery and cloth with complicated designs and color schemes, and Indian weaving.

Women—Very advanced needle and color work, pottery, design and painting, and weaving, as above. Cloth and carpet looms, tables, cabinets, work benches, and other equipment needed in the occupational therapy department are made in these shops.

Two thousand four hundred four articles were sent to the general storeroom for hospital use during the month of October, 1922, from a group of eight classes (four men's and four women's). This does not include the articles awarded to patients in these classes during October.

Need Constant Medical Supervision

Those who are capable of further advancement are promoted to the trade industrial advanced classes (advanced classes in wood and cabinet work and wood turning, where power machines are used), agriculture, poultry raising, academic, commercial, and drafting, or to placement work in hospital departments, as the condition of the individual case may warrant.

Patients assigned for occupational therapy should have constant medical supervision that changes in the patient's

*From a recent report of St. Elizabeth's Hospital, Washington, D. C.

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What may the patient have to eat?

IN supplying what a patient needs, may have, and will like, the prepared cereal food, Grape-Nuts, has for many years been found of great value.

The long, slow baking of the wheat and malted barley in Grape-Nuts, partly changes the starches of the grain to dextrin and maltose. This partial predigestion greatly increases the availability of the food to a delicate stomach. Authoritative tests by independent investigators have shown that the carbohydrates of Grape-Nuts are soluble to an exceptional degree; and the nourishment is readily assimilated without contributing to putrefactive conditions in the intestine.

Grape-Nuts includes with the proteins and carbohydrates a supply of essential mineral salts, vitamin B (demonstrated by thorough laboratory tests in feeding) and a considerable bran roughage—all from the grain.

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Grape-Nuts is delightfully crisp and has a most appetizing flavor. It is convenient for sick room use, because ready to serve direct from the package; a small portion constitutes a serving. Grape-Nuts can be obtained from any grocer.

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mental condition may be noted and advantages taken of them. It is also necessary to follow up these cases constantly in a systematic way, or large numbers will drop the work for various reasons. A medical follow-up makes possible vocational advice to the individual upon his discharge from the institution.

THE ROLL CALL

Minnesota

The following institutions in Minnesota have added occupational therapy to their course of treatment:

State Sanatorium, Ah-gwah-ching.
Glen Lake Sanatorium, Oak Terrace.
Nopeming Sanatorium, Nopeming.
St. Paul City and County Hospital, St. Paul.
Minneapolis General Hospital, Minneapolis.
Ottertail County Sanatorium, Battle Lake.
Mineral Springs Sanatorium, Cannon Falls.
Sunnyrest Sanatorium, Crookston.
Lake Julia Sanatorium, Puposky.
Sand Beach Sanatorium, Lake Park.
Buena Vista Sanatorium, Wabasha.
Riverside Sanatorium, Granite Falls.
Southwestern Sanatorium, Worthington.
Oakland Park Sanatorium, Thief River Falls.
Fair Oaks Lodge Sanatorium, Wadena.
Deerwood Sanatorium, Deerwood.
Thomas Hospital, Minneapolis.
U. S. Veterans Hospital No. 65, St. Paul.
U. S. Veterans Hospital No. 68, Minneapolis.
Hopewell Hospital, Minneapolis.
State Insane Hospital, Fergus Falls.
State Insane Hospital, St. Peter.
State Insane Hospital, Rochester.
State Hospital for Crippled Children, Phalen Park, St. Paul.

Ontario

The following officers have been recently elected by the Ontario society:

President, Miss Helen DeLaport; vice president, Miss Helen Mowat; corresponding secretary, Miss Evelyn Eastmure; recording secretary, Miss Aileene Marks; treasurer, Miss Kathleen O'Grady.

Fees are to be $2 for active members and $5 for sustaining members, as formerly. As a result of the publicity campaign carried on in June the society has been able to open a curative work shop consisting of two large rooms and an office at 21 So. Mary Street. A committee of five had charge of the decorating, furnishing and equipment of the rooms. The society will take private pay patients and mental defectives and nerve cases at the beginning. The Hamilton Branch of the society recently has sent a splendid report of its work and progress. This society financed an aide at the Hamilton General Hospital, and the work was so much appreciated that an aide was appointed to the permanent staff. The London Branch was asked to arrange a demonstration of occupational therapy for the meeting of the American College of Surgeons held in that city.

Pennsylvania

An occupational therapy department recently was opened at the Children's Hospital, Philadelphia, under Miss M. M. Grebe, graduate of the Philadelphia School of Occupational Therapy.

On December 5 a tea and sale of work done by graduates of the school and their patients were held at the Philadelphia School of Occupational Therapy, 2200 DeLancey Place. The entertainment was arranged by Miss Mary Pardee Earle, secretary of the board and a graduate of the school, with the cooperation of the members of the hospitality committee and other members of the board and was primarily for the purpose of publicity. There was a large attendance and much interest was expressed by the guests in the work shown.

The Association of Aides met on November 27 at the Philadelphia School of Occupational Therapy with Miss Ida F. Sands, president, in the chair. A short business meeting was held at which time the name, scope and purpose of the association was discussed and the following committee was appointed to report on and to make suggestions covering these points: Miss Katherine I. Wellman, Miss Helen Campbell and Miss Florence Wellsman Fulton, chairman. The program for the evening was the discussion of the various materials to be used in basketry, the best places at which to purchase materials and other matters of interest in connection with this craft. Mr. Frank Lane, head occupational therapist, Philadelphia Hospital for Mental Diseases, Byberry, brought in some willow which is raised at that institution and explained how it is planted, cut and used. A number of very interesting baskets which had been made by the aides or their patients were displayed. It is the intention of the president, assisted by the program committee, to make these meetings of practical interest to all who are in the work and each month it is proposed to discuss one of the crafts in general use.

Washington, D. C.

At the annual meeting of the District of Columbia Association November 7, a committee with Mr. C. C. Dunn as chairman was chosen to revise the constitution and make any suggestions for amendments. Foremost among the amendments was the change of name of the society from the District of Columbia Occupational Therapy Association to the Occupational Therapy Association of the District of Columbia.

The following officers were chosen: president, Miss Miriam Morriss, supervisor of aides, U. S. Veterans' Bureau; vice president, Miss Alberta Montgomery, supervisor of aides, Walter Reed, General Hospital; corresponding secretary, Miss Emily L. Haines; secretary-treasurer, Miss Viola Cushman, director of occupational therapy, Tuberculosis Hospital.

The five directors are: Mr. C. C. Dunn, St. Elizabeth's Hospital; Mr. J. Neligh, Neighborhood House; Miss Edda Duggan, supervisor of aides, Veterans' Bureau General Hospital, No. 32; Mrs. Emy Sommers, Walter Reed Hospital; Miss Ellen Canton, St. Elizabeth's Hospital.

Wisconsin

The Wisconsin Society held its annual meeting on November 23. The growth of the organization was apparent as 29 members had been present the previous year and this year not only were there 75 in attendance but this dinner was the second gathering of that size within six weeks. Miss Alfred Benson of Chicago addressed the meeting on the work for "The Shut In." Five minute addresses followed on various new phases of occupational therapy.

The Junior League of Milwaukee gave its annual play three nights early in December to raise money to carry on the occupational therapy at the Curative Workshop, Columbia and Children's Hospitals, and work for the shut-ins. During the intermission pictures were shown of patients at work in occupational therapy departments.

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FOREIGN CORRESPONDENCE

LORD DAWSON URGES FOUNDING OF HOSPITAL FOR PERSONS OF MODERATE MEANS

(By Our London Correspondent)

THE new session of the Medical Society of London was opened on the evening of October 16, 1922 by the recently appointed president for the medical year, Lord Dawson, a prominent London physician. The session was interesting not only on account of the subject matter of the address and its excellent delivery, but also because it marks the society's entrance upon the 150th year of its existence. It is the oldest of the metropolitan associations of its kind. When this society was founded the population of London was under 700,000 and the city contained 774 general medical practitioners, the old rough proportion of one doctor to 1,000 persons prevailing; at that time the Royal College of Physicians of London was composed of forty-three fellows and seventy-four licentiates.

Lord Dawson in a very able and analytical address dealt with the prevalence of neuroses in these days and their treatment by suggestion.

The growth of medical knowledge and the increasing number of sciences associated with medicine, he declared, were making diagnosis and treatment rest on collective rather than on individual efforts. That necessity for collective efforts postulated institutions specially equipped as hospitals and clinics, with laboratories and accessories, and such institutions should be properly distributed over the country, if the best that medicine could give was to be available. The growth of such institutions made all the more important that those first established should be of a good pattern. The more medical science advanced and the more expensive it became, the fewer were the people who enjoyed its benefits. The public looked to doctors for the remedy and that was to be found in cooperative endeavor.

As for the management of hospitals, the speaker submitted three propositions for discussion: (1) Such institutions should be run on economic but not on commercial lines. The laity should cooperate in their administration, while the technical direction should be under a medical committee. (2) Provision should be made for a proportion of the patients who could not defray the cost of their treatment, professional fees being included in, or independent of, the charges for the institution in accordance with local arrangements. (3) The patients attending such institutions should retain their own doctors, who would thus be brought into direct connection with specialist and consultant colleagues.

The new institutions, the speaker went on to say, should not be annexes to the existing hospitals, which are usually in densely populated neighborhoods, but in places with open space around them. They should be suitable for the man of £500 ($2,500) or £600 ($3,000) a year. How could that be done? The only solution, it seemed to him, was some system of insurance; not state insurance, for that was neither advisable nor feasible. Could not the large insurance companies take the matter up? It was for the medical profession to hammer out the best line of development.

Sir Humphrey Rolleston, president of the Royal College of Physicians, said that one of the difficulties to be faced was the change in character of disease during a single lifetime. How much of it was due to altered conditions of life, say in New York and London? Might not the advance of nervous disease be apparent, owing to better education? He had to confess that the running of health institutions for people of moderate means was a most difficult problem.

* * * * *

A great deal of the financial stress of the London hospitals is due to lack of organization, especially to lack of cooperation. The fact is emphasized by the report issued recently by Sir Napier Burnett, director of hospital services, Joint Council of the Order of St. John and the British Red Cross Society. This report deals with the voluntary hospitals, excluding London, and it shows that the majority of these hospitals were able to pay their way for the first time since the war. The workmen's contributions have been very successful. Your correspondent was in the city of Norwich a few weeks and learned from Dr. Samuel Barton, one of the originators of the workmen's contributory scheme in Norwich itself and in Norfolk the county of which it is the capital, that in every part of Norfolk this scheme had "caught on." Norfolk it may be said is purely agricultural and the earnings of the laborers are small, but the result of the plan has been most successful. Norwich hospital is paying its way and getting out of debt. The same can be said of hospitals in all parts of the country, London excepted.

* * * * *

There has been a great stir recently throughout Great Britain owing to the reported mismanagement of institutions for the insane and mentally defective. A Dr. Mon-

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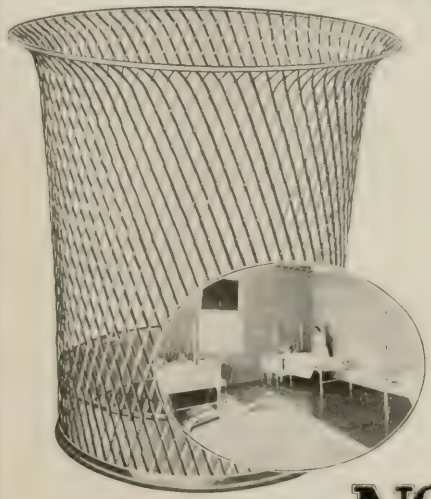

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tagu Lomax for some months past has been contributing articles to the lay and medical press in which he brought grave charges against the conduct of asylums. Indeed in these articles, a series of which have been contributed and are being contributed to the *Medical Press and Circular*. He brought numerous specific charges of inhuman and improper treatment of insane persons in asylums. Dr. Lomax was himself for a time in the asylum medical service and in July of last year published a book entitled "Experiences of an Asylum Doctor" in which strong accusations were made as to the scandalous manner in which inmates of the institutions for the insane and mentally defective were treated.

The other day there appeared the eighth annual report of the board of control, the bureau upon which rests the responsibility for the treatment of lunatics and mental defectives. It deals with the year 1921, which as a writer in the *Morning Post*, an influential daily journal, truly says was a stormy year for all those concerned in the management of asylums.

Money was lacking on the one hand, the financial conditions compelled local authorities to check expenditure wherever possible, and on the other special circumstances combined to focus public attention upon any defaults in the treatment of the patients or the conditions under which they were living, the report brings out. The cost of maintenance of the hospitals remained high, while at the same time there was a large increase in the number of attendants and nurses owing to reduced hours of duty, and this larger service was placed on a higher scale of pay. According to the report which does not attempt to answer the charges, there is a very considerable increase in numbers of the insane and mentally defective. The main factor in the increase in numbers during 1921 was the low number of deaths in the institutions for the insane as although the changes involved by slightly increased admissions nearly balanced each other, the admissions showed a large excess over the discharges and deaths taken together. As the number in institutions comprise over 80 per cent of the total number of notified insane, they obviously exercise a preponderating influence.

BEING FAIR TO YOUR FEET

There are some of the most important shoe sins:—(1) Arches, (2) curving inner edges, (3) pointed toes, (4) high heels, (5) tight fitting, (6) poor fitting.

And these are a few of the impairments they produce:—(1) Bad posture, (2) weak abdominal muscles resulting from bad posture, (3) fatigue, (4) nervousness, (5) deformation of the foot, (6) impaired circulation.

The day will come when the narrow, high-heeled shoe will be unanimously derided and will look as out of place as would a crinoline and hooped skirt in the subway. The untramelled toes of the baby and primitive man are the perfect models. If the modern shoe was even beautiful since it cannot be comfortable, our suffering might not seem so absurd. But just watch people crossing a street, and mentally compare their staccato hops and affected jerks with the rhythmic swing of the savage. Grace is his because he has flexible, broad and strong support for his weight. As you ride down town in the car, take a shoe census, and see how many well-shaped feet you see and how many well-fitting shoes.—*From the Health Letter of the Life Extension Institute, New York.*

My idea of man's chief end was to enrich the world with things of beauty, and have a fairly good time myself while doing so.—R. L. Stevenson.

METHODIST HOSPITALS ASSOCIATION TO CONVENE

The National Methodist Hospitals and Homes Association will hold its fifth annual meeting in the auditorium of the Methodist Book Concern in Chicago on February 14-15, it is announced. All Methodist hospitals and homes for aged and children are expected to send representatives to the meeting.

E. S. Gilmore, superintendent of Wesley Memorial Hospital, Chicago, is president of the association and will preside at the sessions. Addresses will be made by Dr. Frederick W. Slobe of the American College of Surgeons, Dr. Hastings Hart of the Rockefeller Foundation and Dr. N. E. Davis of Chicago.

The complete program follows:

WEDNESDAY MORNING, FEBRUARY 14

Devotions—Conducted by the Rev. John Thompson, D.D., pastor of Chicago Temple.

Reading of minutes, W. H. Jordan, secretary.

Address—"How to Finance Your Institution: Maintenance, Expansion and Endowment," S. W. Robinson, executive secretary, Methodist Home for Children, Williamsville, N. Y.

Discussion.

Address—"Better Homes for the Aged," E. L. Strecker, Home for the Aged, Cincinnati, Ohio.

Discussion.

Address—"To What Extent is the Board of Trustees Responsible for the Medical Care of Patients," Dr. Frederick W. Slobe, Department of Hospital Standardization, American College of Surgeons, Chicago.

Discussion—Led by C. C. Hurin, superintendent, Iowa Methodist Hospital, Des Moines, Iowa.

WEDNESDAY AFTERNOON, FEBRUARY 14

Devotions.

Address—"Organizations in the Light of the Research Conducted by the Rockefeller Foundation," Dr. Hastings Hart, Rockefeller Foundation, New York.

Discussion.

Group Meetings:

(1) Hospital Group, led by G. T. Notson, superintendent, Methodist Hospital, Sioux City, Iowa.
(2) Homes for Aged, led by J. W. Irish, executive secretary, Methodist Hospital, Madison, Wis.
(3) Homes for Children, led by J. B. Jones, field secretary, Children's Home, Worthington, Ohio.

WEDNESDAY EVENING, FEBRUARY 14

Devotions.

Moving pictures with films of hospitals and homes, J. E. Lacount, field secretary, New England Deaconess Hospital, Boston, Mass.

THURSDAY MORNING, FEBRUARY 15

Devotions.

Address—"Discoveries Resulting from a Study of the Survey of Hospitals and Homes," N. E. Davis, corresponding secretary, Board of Hospitals and Homes, Chicago.

Discussion.

Business.

Reports of officers and committees.

Election of officers.

THURSDAY AFTERNOON, FEBRUARY 15

Devotions.

Round table discussion, led by J. E. Diekmann, president, Bethesda Hospital, Cincinnati, Ohio.

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XX, *March 1923* No. 3

THE MODERN HOSPITAL IN THE CITY PLAN

By PHILIP W. FOSTER, City Planner, Cambridge, Mass.

THERE are few cities of any appreciable size in the United States today that do not have some sort of hospital. In all the larger cities there are many such institutions ranging all the way from the relief station to the large special hospitals built and organized to take care of some one of the many ills from which the human family is suffering.

The modern hospital then is one of the fixtures of our cities and in any broad planning program its location should be taken into account. The chosen site must of course provide for and meet the needs and requirements incident to the operation of the hospital plant, but it also should be in such a location as to be a benefit to the city and an integral part of its plan.

The hospital of today stands for and is an example of efficiency, cleanliness and organization carried out with painstaking thoroughness in all its departments. Various experts are employed in the work, and each contributes some special knowledge and experience to the perfection of the plan. Good architects are employed to coördinate the planning and to make the interiors cheerful and attractive as well as to give a dignified and beautiful architectural expression to the exterior. There are many examples of modern hospitals that might well be classed as monumental buildings.

The grounds of Mendota Hospital, Madison, Wis., are well related to a public reservation on the shore of a lake.

With all this knowledge and thought lavished on the buildings themselves, is it not strange that so little care is so often shown in the selection of the site and its relation to the city plan? And after all is not this the real fundamental problem? For, given a good site, the other problems become fairly simple, and, given a poor site, even the best brain and talent can only try to minimize that which should never have been.

The up-to-date hospital group, well designed, well located and built of permanent fireproof ma-

terial is bound to be one of the lasting and impressive features of the city and often a landmark for the whole surrounding country. At best, the number of really notable buildings in any city is comparatively small so that it is decidedly important that the most should be made of every opportunity. It is only by the proper grouping of such public and semi-public buildings at well chosen points, provided with adequate sites and affording proper settings that the city can reap the full benefit from the often very large sums expended in their erection. Failure to recognize this phase of city building has caused the loss of many thousands of dollars that have been laid out on architectural skill and adornment, located where it is unseen and therefore unappreciated.

Principles in Selection of Site

This brings us logically enough to the question: What is the best location for a modern hospital and how should it be related to the city plan? And, of course, the answer must always depend on the particular city and the character of the hospital itself. However, there are a number of fundamental principles and considerations that will govern the selection of a site, first from the point of view of those who have the responsibility of operating the hospital, and second from the point of view of those who are interested in the proper development and expansion of the city.

Taking up the problem from the viewpoint of the hospital authorities, the principal requirements of the site would be light and air, freedom from noise and dirt, accessibility, provision for expansion and agreeableness of surroundings. Viewed from the city's side of the question, the considerations that would govern the selection of the same hospital site have to do with the accessibility to the center of population, with the interference of such a tract with growing residence districts, with the installation of public utilities and the extension of thoroughfares, and in general, with the effect of the building group as related to the street vistas and to the surrounding property. These two groups of requirements are in some cases identical and in all cases consistent.

The factors that taken together produce a good residence district would also produce a good hospital site; furthermore whatever works as a benefit to the city would also be, in a broad sense, a benefit to the hospital, and vice versa. Any friction that has come from these two points of view is the result of failure to coöperate in the early stages of the undertaking. Years pass and troubles arise from an attempt to adjust a more or less arbitrarily selected site to subsequent developments that had not been thought out because not foreseen. A few hours spent at the beginning of any project in careful planning and study of the problem are worth weeks of irritating negotiation and compromise later.

To go back to the requirements of a site as set down from the hospital viewpoint we have in the beginning sunlight and fresh air. To insure the first of these two governing factors, the site selected must be of ample size and with topography of such a character as to give the proper orientation. Now the size of the property to be acquired for a modern hospital will vary with the scope of the institution, the size of the city and the character of the surrounding country. However, it is fair to assume that the tract should be at least ten acres in extent and with the larger institutions might run as high as one hundred acres. This also is related to the question of the provision for the expansion of the plant to keep pace with other developments and will be touched on again. A large sized tract will insure an abundance of fresh air; a location on a small hill or eminence, not so high as to be exposed and bleak in winter but high enough to overlook its immediate surroundings, is desirable. A good growth of trees will add greatly to the attractiveness and protection of the site, and by proper thinning and planning can be kept from interfering with the necessary required supply of either light or air.

Far From Factories and Railroad Yards

Next we have the problem of quiet and cleanliness in relation to the hospital site. To have quiet, the property must be located far from factories or railroad yards and not directly on main thoroughfares or car line streets. Where the grounds are extensive and allow for a considerable setback for the buildings and a wide margin of tree and shrub planting, the nearness of the main street is not an objection and increases the accessibility of the property. The same isolation that prevents noise will also be good insurance against fire from outside causes.

To insure cleanliness the hospital site should be to the windward, or at least out of the line of the prevailing wind from such sources of dirt and soot as factory chimneys, switching yards, or even the busy center of the city. Dirt from highway travel should also be guarded against, but with our modern automobile highways of asphalt or concrete construction this nuisance has been largely abated.

Nearness to the center of the population of the city and easy accessibility are the next factors to consider, for visitors and out-patients must be thought of as well as the regular patients. In the smaller cities where there is no downtown emer-

gency relief station it is even more important that the hospital be not too far removed from the center of life and activities.

Growing things expand, spread out, and our cities are surely no exception to the general rule. The modern hospital plant if it is to be a permanent institution must be prepared to expand and grow to keep pace with the increasing demand from the ever-expanding city population. Even with the present tendency toward decentralization and countryside development, the hospital will remain a special feature that will function better as a collective group than as a series of widely scattered units. Thus while the population ultimately to be served may be spread over a wider area it is not likely to decrease in numbers. The site selected, then, should be either large enough to take care of later needs or so located as to be easily extended in the future. It would be much easier to obtain sufficient land at the beginning than to acquire it later after the money spent in developing the hospital site itself has been reflected in the increased price of the surrounding property. In determining the acreage of the tract it should be borne in mind that modern requirements are continually growing more exacting and that in addition to normal expansion it would be well to provide for a park like treatment, with trees and shrubs, sunny lawn areas and shady groves for convalescent patients, superintendent's house, nurses' home with tennis courts and other means of recreation, and perhaps some garden developments.

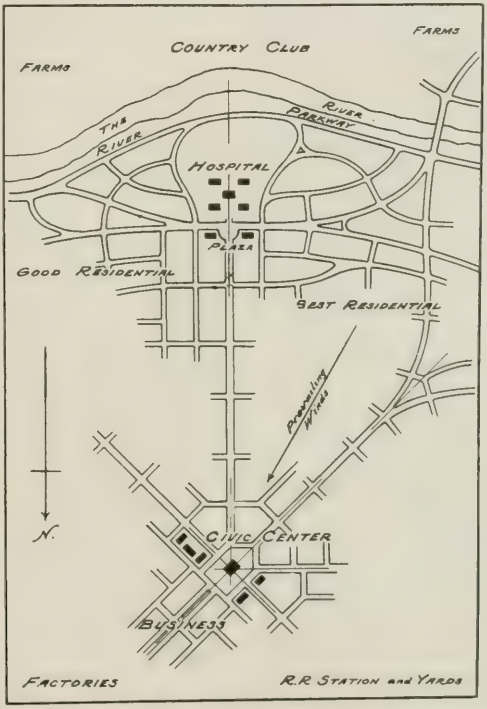


Diagram showing the relation of the hospital to other features in the city plan.

A general plan of the whole proposed plant showing the future scheme with its approaches and service, together with its problems in grading, drainage, planting and other landscape features, would be a great help not only in determining the size of the property to be acquired but also in the location of its boundaries.

In setting forth the requirements of our hospital site no mention was made of the availability of such public utilities as sewer, water, gas and electricity. This was not an oversight. Of course, such facilities are essential to the proper operation of the hospital plant and it is fair to assume that in any modern city they would be easily provided. Any site which for reasons of topography was rendered inaccessible for the city utilities would undoubtedly in itself be a poor location for a hospital. The most common illustrations would be land too low and therefore difficult to drain, or land too high to obtain a good road approach and sufficient water pressure. No progressive city would hesitate to extend public utilities to a good hospital location, as such a development would be a direct benefit to the city and a further ultimate benefit in opening up any intervening vacant land for building, thus increasing the taxable property.

So far we have thought of the hospital and its location from the hospital point of view with only a slight relation to the city's activities as represented in the public utilities. Now what is the city's interest in the matter and what are the problems involved as regards the city plan? Let us put the question another way. Let us assume, a hospital is to be built and the subject of the site has been referred to the city planning commission or planning board by the city authorities for approval. Under these circumstances what should the board consider and how should it judge the proposal so as to fulfill its trust and safeguard the interests of the city as a whole?

To segregate a continuous tract of land of ten acres or more in a growing city and set it aside for a special use is always a problem which may contain a threat to the street circulation system and a barrier to the growth of an entire section of the city. The more central such a location is the

more serious the whole question becomes. Yet the accessibility of the hospital to the mass of the population is an important consideration.

Residential Section is Best Location

To accomplish this desirable result the site must be in the residential section of the city. Such sections are usually, in the smaller cities, within easy walking distance of the business center. Where there are two or more distinct residence districts, then the location that comes nearest to the center of population and at the same time meets the other requirements, which we will take up, will best serve the city as a whole.

Having placed the hospital property in the residence district, the next step of importance is to see that it does not in any way block the natural expansion of the district. An institutional tract of any size or character always acts as a barrier to other developments. Thus to make its location an asset instead of a liability to any section it should be at one side, out of the line of growth. Here it also will act as a protection against undesirable encroachments, or as a neutral belt dividing sections of different character. A hospital site that stands between a good residence district on one hand and one of lesser character on the other would help both by protecting the better and by adding a desirable open green space adjacent to the more crowded area.

The next important step is to see that the hospital site does not interfere with the extension of any of the main thoroughfares or with the expansion of the utilities systems. This again emphasizes the advantage to the city, as well as to the hospital, of having the property located on a small hill. On the hilltop it is pretty apt to be out of the line of traffic, as the thoroughfares are much more likely to skirt the elevation and not go over it. Such a location is also out of the line of valley drainage for storm water and the natural fall required for main sewer construction.

Again the planning board should see that the property selected does not include land that will in the future be essential to the proper development of the park system. On the other hand, to have a large hospital group adjacent to park property will add to the openness of the park area and increase its apparent extent and its views. A good mass of building or a well designed tower is always a welcome additional point in park vistas.

As already pointed out the number of good monumental buildings in any city is relatively small so that it is very important from the city's viewpoint that what there are shall be as effective as possible. With this point in mind the board should consider carefully the relation of the property to the surrounding streets and study the possible building sites on the property in connection with the street vistas. The setting of the buildings can often be greatly improved by the creation of a small, quiet, open square or plaza at the entrance to the hospital grounds. This will give dignity to the hospital group and at the same time create other desirable sites for public buildings, churches or even good homes. Such a square could easily become a center for the institutional activities of the cities.

Zoning as a Protection to Hospital

Having once studied and approved a location for a hospital there should rest on the city authorities a moral obligation to protect the institution there established from all surrounding developments that would tend to depreciate the property for its intended use. For the city to locate a schoolground or an athletic field, where crowds of noisy and enthusiastic persons would gather for athletic contests, next door to the selected hospital site would surely be to defeat the first intention and to produce a nuisance and a serious drawback to the welfare of the hospital.

The control of surrounding property by the city so as to prevent the erection of buildings and the establishment of uses, by private individuals, that would become a menace to the usefulness of the hospital is a much more difficult problem. Without a zoning ordinance in force it might be impossible to prevent a private playfield, a commercial garage or even a factory building from becoming the hospital's next-door neighbor. The passage of a zoning ordinance and the mapping of restricted districts in advance of the time that the hospital site is to be determined upon would greatly simplify the work of those who will be responsible for the future welfare of the institution.

The city planning board should do all that is in its power to coöperate with hospital authorities to make the most of the hospital development as seen from the city's viewpoint. The location and establishment of a modern hospital in any city offers great possibilities for increased beauty to the community and, if rightly guided and controlled, contains the germ of a great expression of civic consciousness.

It makes little difference what the problem is that confronts the city; it will be seen after a very little study, that its ultimate solution is intimately related to all the factors that enter into the making of a city plan. And, as has been shown, the location of the modern hospital in a progressive city is no exception to the rule. No sooner do we start to consider the problem seriously than we find it is closely interrelated to the

Henry Ford Hospital, Detroit, with its attractive grounds has been located with some thought as to its relation to its surroundings.

problems of the selection and extension of main thoroughfares, the location of parks, parkways, playgrounds and schoolgrounds, the relation to the civic center, the right use of land and the whole question of zoning. When we consider the far-reaching effects and the seriousness of the decision to be made in determining the right location for a modern hospital group, we will see that it might well be made the reason for inaugurating a movement to undertake a civic survey and to work out a broad comprehensive city plan.

And as the goal of hospital work is the betterment and right physical development of humanity and especially the people it directly serves, so hospital workers could well afford to be in the forefront of the city planning movement in any community. Here they could use their influence and experience in advocating better homes, better schools, better parks and playgrounds and a better organization and coördination of these elements by the adoption of a better city plan.

In this higher sense the modern hospital would be "in the city plan," not merely as regards its own location and its individual relation to the city's activities, but as a worker interested in the right advancement and development of the city in its entirety, as a result of a health growth and clear mental expression of its people.

CINCINNATI CONDUCTS MENTAL HYGIENE CLINIC

Attention will be drawn to Cincinnati for the next five years, where has been organized a Mental Hygiene Clinic, in an attempt to get at the underlying causes of mental disorder. Through the clinic there will be studied and formulated preventive measures aimed in general to lessen crime and relieve the ever-growing financial burdens upon city, county and state governments in punishment of criminals, care of mental dependents and delinquents.

One of the original features of the experiment is that it is primarily a civic undertaking of Cincinnati, as it is financed by the Community Chest.

Dr. Emerson A. North resigned as head of Longview Hospital for the Insane to accept the directorship of the clinic. Dr. North has been succeeded at Longview by Dr. E. A. Daber, superintendent of the State Hospital for Insane at Dayton, Ohio.

Associated with Dr. North in conducting the experiment is Dr. V. V. Anderson of New York, associate director of the National Committee for Mental Hygiene. Dr. Anderson is a consultant psychiatrist. He conducted the original survey made in Cincinnati when the movement for the mental hygiene clinic experiment was inaugurated by the mental hygiene council of the Public Health Federation of Cincinnati.

The mental hygiene clinic will work with all courts, schools, social agencies and the medical college and general hospital. The director, Dr. North, has an official position on the teaching staff of the medical college. Wards at the Cincinnati General Hospital will be used for cases to be placed under observation.

The experiment was inaugurated following discoveries made by the public health federation in a survey of the minds of known criminals, habitual dependents, juvenile delinquents and retarded school children. It was found that a big percentage was suffering from one form or another of mental disease or weakness.

The clinic will study all cases referred to it by police courts, juvenile courts, charity organizations and hospitals and prescribe treatment.

The function of the clinic will be to diagnose cases believed to involve mental abnormalities, prescribe treatment and conduct a follow-up to see that the treatment recommended is carried out. The examination will divide itself into four parts:

(1) An examination of home conditions to determine what factors there are, if any, in the home life of the patient tending to cause or to aggravate his abnormal behavior. This study will be made under the direction of the psychiatric social workers of the clinic (social workers who have been trained in the study and care of mental cases).

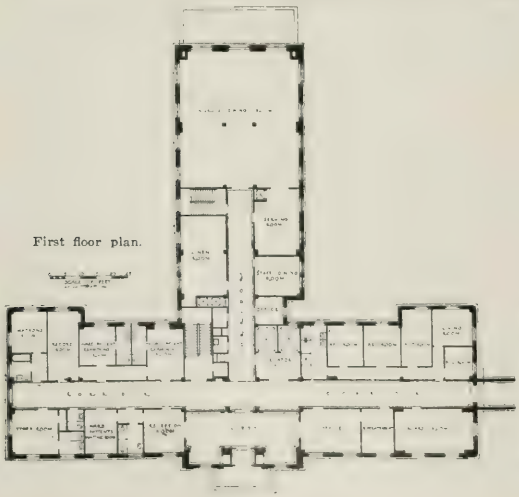
(2) A psychological examination to determine the intelligence level, that is, whether the child or adult is of average intelligence, above average, below average or actually feeble-minded. It will also disclose any particular abilities or disabilities that may be of moment.

(3) Examination by a physician to determine whether there is anything in the physical condition of the patient that may be causing the mental disorder.

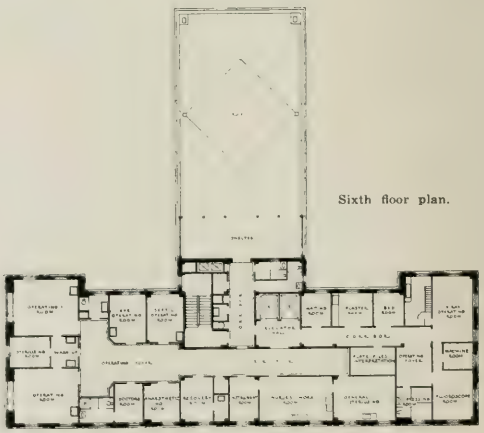
(4) Finally a study by the psychiatrist for evidences of developing mental disease, wrong mental attitudes, mental conflicts or anything else in the thought content of the mind that may be causing the individual's abnormal behavior.

HACKENSACK HOSPITAL, HACKENSACK, N. J.

Perspective view of exterior. Crow, Lewis & Wick, Architects.



First floor plan.



Sixth floor plan.

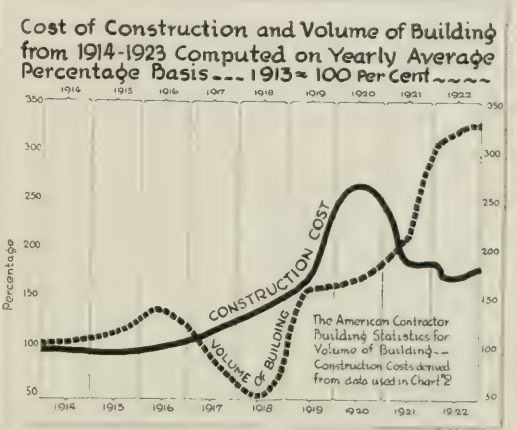
THE BUILDING OUTLOOK FOR 1923

THE year 1922 was a period of remarkable construction, and it appears that with practically no diminution of volume building operations will continue over into 1923. The actual viewing of operations in a number of cities chosen at random, as well as all available statistics, shows that an enormous volume of winter construction has been going on.

During the normal winter there is a slack of building operations while material producers and dealers build up their stocks. While there have been instances of this going on this year, they are indeed few. In general, very little of the strain on producers to fill orders has been relieved, except as the car shortage has affected shipments.

Just what this situation will mean to spring material prices will depend upon how much of a spring boom is piled up on top of the construction already under way. Although every project which has been executed this winter would seem to relieve the prospective spring boom that much, the fact is that there is no immediate sign of the demand for building being satisfied. If construction costs are such that men feel so free to build as they did during 1922, there is still such a great bulk of embryonically contemplated projects that there promises to be no decline in the volume of work.

A reaction between cost and volume is, of course, inevitable. There will be a great temptation, if volume increases, to raise prices, and in the case of some materials this will be justifiable. But the law of supply and demand will hold back a great number of projects, if building costs rise. The only check on this situation will be the car shortage, and that promises to be less severe this spring, all other things being equal. The cost of construction and the volume of building from 1914-1923, computed on a yearly average percentage basis, is shown in Fig. 1.



Courtesy, The American Contractor

FIG. 1.

NOTE: The computations on this chart are on a yearly basis with the exception that construction costs are plotted for 1922 by quarters. The percentage for any year may be determined approximately by gauging where the percentage line crosses the mid-point of the year. The exact percentages for volume are as follows: 1913, 100; 1914, 102; 1915, 112; 1916, 138; 1917, 91; 1918, 49; 1919, 161; 1920, 173; 1921, 213; 1922, 322.

The index figures on construction costs have been by years beginning with 1913, 100, 98, 97, 103, 120, 144, 178, 269, 193 and by 1922 by quarters, first, 192; second, 176; third, 176; and fourth, 181.

Activity Dependent Upon Labor Costs

Labor is a greatly underestimated item in discussing building costs. The cost of labor enters not only into the high production costs of all materials, but into the cost of actual erection. Labor costs, in this connection, are not the wage per hour or day, but the wage per unit of production. Labor is contributing to high costs by effectually demanding high wages and by having reduced the standard of production. Even in the question of transportation, a sore thumb in all American business, the question of labor costs is the underlying shibboleth. Railroad labor costs and material production costs reflect upon the construction industry in the same measure as the labor costs of actual construction.

Because of the great volume of winter construction which has been carried on, construction labor has not received its usual winter lay-off. On the contrary, many building trades have gone through the winter on bonus scales. Although twelve months of work promises much for the building industry and should be encouraged, in this particular year its good effects will not be evidenced, since no psychology has been built up about it. The workers look upon it as an extra slice of cake instead of a custom, and wage scales have not been set with the idea of having the men productive the year around. Wage scales, some day, may take into consideration the fact that work may proceed on a twelve-month basis.

In San Francisco and other places where scales have been promulgated, contractors have been confronted not by men anxious to get back on the job, but by workers who have been continuously on the job and know that from east to west contractors will pay laborers' fares to get them on payrolls with satisfactory bonuses. This is the situation to be met when contractors make wage agreements for next year.

Any great spring boom will intensify this condition. But it will be a fatuous policy on the part of construction labor to make greater demands this year in any case in which wages were quite high last year. Nothing will kill the building spirit more quickly than a recognition in any city that labor has through sheer force held up construction far greater than its now great burden.

It is generally conceded that the cost of construction is plenty high enough, it being roughly 80 per cent higher than in 1913 and about the same per cent lower than in 1920, and to increase costs even by a narrow margin would mean the deferring of many projects. If labor brings such a condition about, it will have itself to thank for precipitating many of its own members into unemployment.

The gist of all this discussion is that labor, both in and out of the construction industry, can by its wisdom or folly make or mar building activity in 1923.

Upward Tendency in Material Prices

As important as the labor factor is the item of construction costs. During the past four years the market for basic materials has followed a highly involved course. Not yet has the point been reached when the majority of people think that business and building are proceeding on a long time level. It is expected that big changes in prices may come about in the future.

A considerable degree of stability has been established in the prices of four basic construction materials, and whatever the next four- or five-year period has in store, the outlook for this spring at least is a firm market. The four materials which furnish a basis for Fig. 3 are lumber, cement, common brick and structural steel. The chart shows the price changes by quarters during 1913 and during 1922.

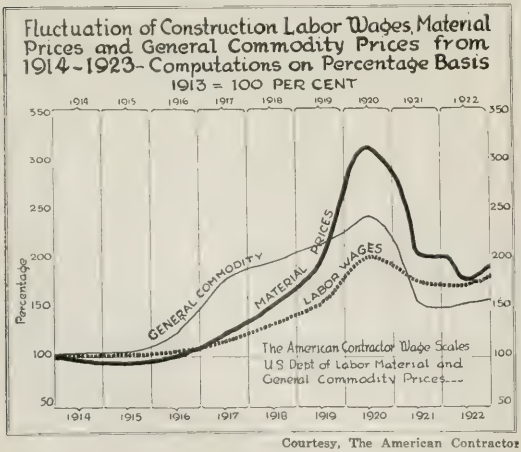
Brick is the only material which stood lower during the last quarter of 1922 than it did during the last quarter of 1921. Cement in 1922 closed at 92.8, taking the average price of the materials during the first ten months of 1921 as the base price, or 100 per cent. Steel closed the year 1922 at 97.9 per cent, whereas it closed in 1921 at 76. Lumber closed in 1922 at 127.5, and at the end of 1921 it was but 103 per cent.

An upward tendency during the early part of this year may be anticipated in material prices, as in the case of labor's wages. The general trend is upward, and a strong demand will never bring it downward.

The year 1923 will not be a good time for excessive profit-making. Just as labor can, if too aggressive, cut off its own nose, so to speak, similar tactics on the part of any of the other factors in the building industry will result damagingly. A big boom may become a boomerang.

As to lumber, there is not much fear that the interests controlling it will willingly see the product soar to such heights as it did in 1920, even in the face of big demand. Far-seeing lumber men know that when lumber prices are too high, people find the most use for lumber substitutes, and lumber has more competition than ever before.

More activity in the steel industry is anticipated this year than there was in 1922. The trend of structural steel is distinctly upward. The percentage price as shown in Fig. 3 during the first quarter of last year was 71, while it closed the year at 98.



Courtesy, The American Contractor

FIG. 2

Because of its wide ranges of use, the price of steel varies in correlation with business activity. Automobile production, farm and industrial machinery production, and building, all affect the steel market. The result is that the price of structural steel is affected, not alone by the volume of construction, but by the general market, which seems to be firm. Producers predict a rising market.

During 1922 the stock of cement was far below that of the previous year because of the coal and rail strikes which combined to harass the cement industry. No construction material is more dependent upon coal than is cement, and this industry is the fourth largest coal consumer of all industries. About 200 pounds of coal are required in the manufacture of each barrel, and every time the cost of coal rises one dollar per ton, the cost of cement rises on that account ten cents per bar-

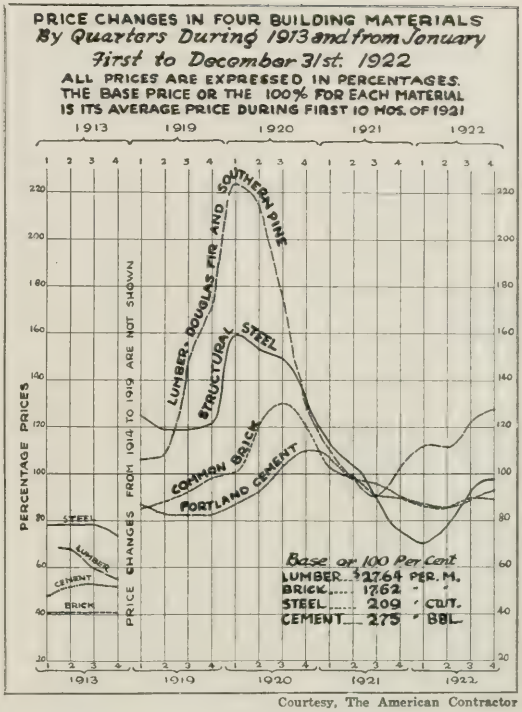
rel. Not all, by any means, of increased costs due to the coal strike have been passed on to the consumer. Thanks to a highly concentrated industry there has not been violent price fluctuation. So far as coal costs are concerned the cement industry has passed the critical stage, and it seems able to draw all coal supplies needed.

General Commodity and Material Prices

Logical discussion of material prices is impossible without reference to general commodities and material prices has progressed from 1914 to 1923. The computation, of course, is on a percentage basis, as that is the only way the relationship can be shown. The base in each case is the price of the valuation in 1913.

That general prices will rise during this year is the belief of prognosticators. Every consideration is being given to machinery to finance farmers, and this in itself will be a supporter of a firmer price level. An inflative influence may be traced to such factors as gold supply and the big Federal Reserve ration supply.

One cannot ignore the part that heavy income taxes play in keeping up price levels, although little explanation seems to be necessary to bring home the fact that taxes add to the living expenses of the nation and consequently to labor costs. Income taxes also add to the production cost and distribution cost of all materials. We had a war and we must pay for it.



Courtesy, The American Contractor

FIG. 3.

NOTE: This is probably the first chart published showing 1913 prices on a percentage basis using post-war prices as 100 per cent. The graphs are all based upon figures appearing in the weekly material price quotations of the American Contractor. Lumber and steel prices are F. O. B. mill. Cement and brick prices are average price to contractors in carload lots in fourteen principal cities.

It is a question whether the level of general commodity prices will rise to the level of material prices, and this question can be answered only after the event has occurred. It is almost certain, however, that the disparity will not be increased even if building prices themselves rise slightly.

Fig. 1 shows the volume of building in twenty of the most important cities of the United States. The total volume of building permits in these twenty cities issued during 1913 is taken as 100 per cent, and then the activity of each subsequent year is figured on a percentage basis. The nearer the coincidence of the volume line and the cost line, the nearer does the actual volume of construction approach the actual volume of 1913, it can be seen. The volume in the last year has been high above the 1913 level.

Contractors Learn Business Methods

Material prices have not skyrocketed as a result of the unparalleled boom of 1922. The cost of labor, it is true, is high, but through wise and constantly more efficient managerial direction the production of labor has been increased through scientific and practical coordination. Perhaps this is the most important message for those who wish to foretell what is in store in 1923. For the contractor who wishes to make contracting less of a guess and more of a business proposition, job coordination and the wise use of up-to-date equipment on a cost accounting basis have done much. Never have contractors stood on the threshold of a new year with so much of the real fact basis of business method in mind and in operation.

During 1922, a year of more than normal activity, material market did not run away, and this condition is best for prosperity of an abiding nature. In 1923 we might better have less building with more stability, than more building with less stability. A slump will follow a wild boom with rapidly rising costs, but activity holding to the good foundation levels established last year will be of an enduring nature.

Statistics prepared for THE MODERN HOSPITAL

Contracts Awarded for Hospitals and Sanatoriums

District	1920 No	1920 Cost	1921 No.	1921 Cost	1922 No.	1922 Cost
	45	$ 3,310,300	59	$ 7,219,200	70	$ 8,998,200
Boston	122	9,811,700	97	$ 8,217,300	111	22,567,300
New York	60	4,597,400	91	10,201,000	96	9,871,200
Philadelphia	56	7,693,800	76	9,168,100	55	5,532,400
Pittsburgh	121	14,968,100	118	16,864,800	134	23,244,800
Chicago	25	1,417,100	21	3,552,000	19	1,293,500
Minneapolis						
Total	429	$41,798,400	462	$55,222,400	485	$71,507,400

Contracts Awarded for Homes and Institutions

District	No	Cost	No.	Cost	No.	Cost
	20	$ 1,014,100	20	$ 885,700	22	$ 1,135,000
Boston	40	2,982,400	39	5,690,500	52	3,876,300
New York	34	1,197,700	43	1,347,500	50	2,771,800
Philadelphia	21	1,335,500	32	1,758,900	43	2,974,800
Pittsburgh	33	1,691,000	45	4,970,800	63	4,045,500
Chicago	11	523,700	6	219,000	3	318,000
Minneapolis						
Total	159	$ 8,774,400	185	$14,872,400	233	$15,121,400

by the F. W. Dodge Company, statistics which cover the territory north of the Ohio and east of the Mississippi rivers, show that, with the exception of the Pittsburgh and Minneapolis districts, there has been an increase—in some districts a very decided increase—in the number of building contracts awarded for hospitals and sanatoriums in 1922 over 1921. This statement is in large measure also true of building contracts awarded for homes and other institutions.

Indeed during the past four years there has been a steady increase in the volume of building contracts awarded for this class of construction. For the territory covered by the Dodge statistics, building contracts actually awarded for hospitals and sanatoriums in 1919 amounted to $32,009,782; in 1920, to $41,798,400; in 1921, to $55,222,400 and in 1922 to $71,507,400. There was a similar upward trend in the building contracts awarded for homes and institutions. In 1919 these contracts amounted to $7,181,841; in 1920, to $8,774,400; in 1921, $14,872,400; and in 1922, to $15,121,400.

Despite this steady increase, much of the work in this class of construction was held up in 1922 and this accumulated demand will undoubtedly greatly augment the normal requirements of 1923.

Contemplated Projects in 1922

District	Hospitals and Sanatoriums No.	Hospitals and Sanatoriums Cost	Homes and Institutions No.	Homes and Institutions Cost
Boston	91	$11,803,700	38	$ 1,879,000
New York	158	34,009,200	65	4,249,900
Philadelphia	111	7,438,000	72	5,229,000
Pittsburgh	83	11,207,900	54	12,350,800
Chicago	217	29,718,300	117	42,465,000
Minneapolis	27	3,078,500	16	728,000
Total	687	$97,255,600	362	$66,901,700

The height of ability consists in a thorough knowledge of the real value of things, and of the genius of the age in which we live.—Rouchefoucauld.

ASSOCIATION TAKES OVER JOURNAL

The board of directors of the Hospital Social Service Association of New York City, Inc., have announced that the magazine, *Hospital Social Service*, which formerly was published under the auspices of the association is henceforth to be published by the association. A publication committee consisting of members from the board of directors, representatives from the auxiliary section and hospital social service workers will be formed and it will direct the policy of the magazine. Dr. E. G. Stillman, former editor and publisher, still continues as editor.

A. H. A. REVIVES SECTION ON SMALL HOSPITALS

In answer to a demand, the American Hospital Association, through its board of trustees, has voted to reestablish the Small Hospital Section, and it will present a program at the annual session in Milwaukee in late October. The growth of the association has increased the support and material available to all sections, and the rapid extension of the hospital field through the opening of many small community hospitals has extended the need for this material, especially that relating to the smaller hospitals.

Miss Jessie E. Catton is the new superintendent of New England Hospital for Women and Children, Boston, one of the oldest institutions in the state. Miss Catton was formerly superintendent of the Lawrence General Hospital, Lawrence, Mass.

A new building recently has been opened at the Utah State Mental Hospital at Provo, which contains up-to-date facilities for treatment and recreation

THE RELATION BETWEEN HOSPITAL BUILDING COST AND COST OF EQUIPMENT

By S. S. GOLDWATER, M.D., Director, Mount Sinai Hospital, New York, N. Y.

HOSPITAL executives, consultants, and architects are often requested to state the proper proportion of expense between building cost and the cost of hospital equipment. This is really an unanswerable conundrum, for, in the first place, no two hospitals are quite alike in plan, construction, departmental organization or character of equipment, and in the second place, no two building and equipment committees ever mean quite the same thing when they use the terms "building" and "equipment." While many of the factors that cause marked variations in the calculation are sufficiently obvious, it may be worth while to cite a few of them.

Committee "A" charges both site and construction against building cost, because the "building fund" pays for both; Committee "B" starts its building fund with a site in hand; it, therefore, excludes site, and reckons the cost of construction only. Committee "A" regards the fees of architect and hospital consultant as items of building cost; Committee "B," or its accountant, reasons otherwise. Hospital "A" erects a building of the highest character, and then, owing to a depleted pocketbook, equips it poorly; Hospital "B" does not represent the highest type of construction, but has an equipment of unusual excellence. The market prices of building and equipment items do not rise and fall equally or simultaneously; building contracts may be let in a "tight market while equipment orders are placed in an easy one.

Private Room and Ward Equipment Varies

Turning now to types of equipment, is it not evident that private room equipment is one thing, ward equipment another? The proportion of private room and ward beds is, therefore, a factor of capital importance. The equipment provided for an individual patient in a private room may include a specially constructed bed, a hair mattress of superlative quality, a costly dresser, a night table, glass tops for dresser and table, a wardrobe, curtains of chintz, cretonne, or casement cloth, cheap washable domestic rugs or costly oriental ones, a leather-covered upholstered chair, a foot-stool, an individual dressing tray, a wheel chair, an electric fan, a reading lamp, numerous changes of costly bed linen, four or five pillows, and a complete assortment of bed utensils for individual use, the whole representing a far more elaborate outfit than any hospital thinks of providing for a single ward patient. How can any normal figure be given for all hospitals when a given hospital may include many private rooms, few, or none?

But even if the distribution of private and ward beds were the same, uniform standards of expense could not be established, for some hospitals like cheap furniture, which in others is taboo. Or, again, this hospital has an elaborate department of physiotherapy, that hospital has none; or while one hospital puts in hydrotherapy when building and charges the cost to building account, another installs the department later, after the major building account has been closed. Refrigerators may be structurally installed and charged to construction account, or unattached ice boxes may be used and may properly be listed as equipment; they may be lined with porcelain, glass, or galvanized metal, and may be well or poorly insulated, with variations of 100 per cent in cost. Furthermore, the question of relative cost of building and equipment is frequently propounded when only a fragment of a hospital or a subordinate building designed for special use is being built, which adds to the chances of misunderstanding; an extreme case is that of a building designed wholly for pathological laboratory or x-ray work, the equipment of which may be as costly as the building itself.

Rough Proportion is $1 to $10

If a hospital tiles all its service rooms, the cost of building jumps up, and the relative expense of equipment falls (but not the subsequent cost of maintenance).

Some hospitals include lighting fixtures under building cost; others classify this item as equipment. Kitchen and laundry equipment may be charged entirely to building, entirely to equipment, or partly to one and partly to the other; the prevailing practice, however, and in my opinion the correct one, is to charge against building account all attached and built-in fixtures, whether of a general character, such as plumbing fixtures, or of a special kind, such as major laundry and kitchen equipment.

A special word of caution to hospital accountants and statisticians may well be interpolated against the not infrequent practice of accepting furnishings or equipment as donations in

kind, and leaving their market value out of the reckoning entirely.

But I have not yet answered the question. A rough formula which has sometimes been used under compulsion, but which may be totally misleading, is $1 of equipment for every $10 of building cost. The need for caution in the use of this formula deserves special emphasis. That it is not a safe formula for universal use is evident. If important items of fixed equipment are charged against equipment account, if the hospital is designed wholly or chiefly for private patients, or if the diagnostic and therapeutic equipment is unusually generous, a larger relative allowance must be made for equipment.

WARNS AGAINST GOVERNMENT SURPLUS SUPPLIES

Warning that the purchase of government surplus supplies of any character "is questionable economy" is given the hospitals by the special investigating committee of the American Hospital Association, of which Dr. Winford H. Smith is the chairman.

Several classes of these supplies should not be purchased at any price, says the committee, until they are carefully tested by the hospital or by the government.

Recognition of the fact that government surplus supplies had now become several years old and for this reason some have deteriorated led to the appointment of a committee to go into this matter for the protection of hospitals. It also was noted that the more recent sales by the government simply offered the goods "as is," requesting bids on this basis. Practically all hospital supplies purchased from the government are promptly offered by dealers for sale to hospitals in some form and at prices but little below the market regardless of the sales price.

President Bacon of the American Hospital Association has written the proper officers of both the army and navy protesting against the sale of hospital supplies which may have become deteriorated, without careful examination and test by the government and has requested that all supplies so tested shall be so marked as to be conclusive evidence to the ultimate purchaser that the goods had been tested and found in good condition.

The text of the committee's report, signed by Dr. Winford H. Smith, superintendent of Johns Hopkins Hospital, Baltimore; Thomas Howell, superintendent of New York Hospital, New York; and Dr. Joseph B. Howland, superintendent of Peter Bent Brigham Hospital, Boston, is as follows:

The committee appointed to deal with the question of the sale of surplus hospital supplies by the army and navy recommends that the members of the American Hospital Association be circularized by the executive secretary warning that many of the supplies such as drugs, chemicals, acids, rubber goods, ether, catgut and other articles of a similar nature which have been held in stock for a considerable period of time are likely to have deteriorated, and that in the opinion of the commttee it would be a questionable policy and a doubtful economy to buy such goods without careful examination and testing.

It is also recommended that the attention of the members of the association be called to the fact that doubtless the bulk of the surplus goods will be bought by jobbers and that hospitals should in the future be suspicious of goods offered at unusually attractive prices coming from irregular sources.

In general it is the opinion of the committee that purchase of world war army and navy supplies of any character at this late date is a questionable economy and should be done only after very careful inspection.

It is also recommended that the president of the American Hospital Association address a communication to the surgeon generals of the army and navy protesting against the sale of such surplus supplies which may have deteriorated or be of inferior quality, unless and until a careful examination has been made by government authorities to determine their satisfactory condition.

Failure is often that early morning hour of darkness which precedes the dawning day of success.—Leigh Mitchell Hodges.

The new $3,000,000 University of Michigan Hospital at Ann Arbor will look like this when it is finished. New appropriations are awaited to make its completion possible.

CONVERTING AN OLD HOUSE INTO A HOSPITAL

By CARL A. ERIKSON, of Richard E. Schmidt, Garden & Martin, Architects, Chicago.

"A red brick immensity with gray sandstone lintels and a roof of slate in courses of red, green, and dyspeptic yellow. There are two anemic lowers, one roofed with copper, the other crowned with cast iron ferns. Most of the castles of the testy Victorian tetrarchs are gone now or decayed into boarding houses, but the Eathorne Mansion remains virtuous and aloof, reminiscent of London, Back Bay, Rittenhouse Square. Its marble steps are scrubbed daily, the brass plate is polished reverently, and the lace curtains are as prim and superior as William Washington Eathorne himself."—*Babbitt*, Sinclair Lewis.

NO VILLAGE is humble enough to be without one. For they were built by the "very best people" during the dark ages of architecture, the '50s to the '90s. Its large rooms, wide halls, substantial foundations and walls, heavy timbers and wide trim of black walnut certify to its early vintage, to an era of legendary low costs. It has been frequently "modernized" during its half century, electric lights (in open wiring), a number of changes in plumbing fixtures, some lavatories added; the fashions of the passing years are all reflected in one room or another; if not visible, probably buried.

It was just such a house as this that the Penult Hospital Association found on its hands upon the death of one of its leading citizens.

Not so many years ago the stables were remodeled to care for the owner's fleet of automobiles; the hay loft became quarters for the two families in the service. At the same time the old furnace in the house was junked and a modern hot water heating plant installed in the basement under the garage.

Originally the grounds contained about 25 acres, all carefully planted and tended. At the beginning of this century the owner gave all but about two acres around the house to the city as a public park; the house on a slight elevation overlooked the beautifully matured trees.

Bequeathed House But No Funds

The announcement of the bequest set the "Main Street" hospital association agog. The hitherto desultory and spasmodic agitation for improved hospital facilities had never accomplished anything. A hospital, a remodeled frame dwelling of ten beds owned by one of the physicians, was not only a fire trap but had hardly any of the diagnostic or treatment facilities that distinguishes a hospital from a boarding house for the sick. Fortunately there was ample time for deliberation and decision during the period before actual possession of the property was obtained.

The city of Penult is located in one of the middle western agrarian states. An original population of native American stolidity and independence has been diluted by an addition of emigrants necessary at the factories of the town. The wealth of the town is fairly well distributed, no abnormal amount of either poverty or wealth. One-family houses prevail although there are a few "flats," and some apartments; the "kitchenette" has not yet made its appearance. A few bachelors live at the hotel. Careful survey of Penult and its environs indicate an immediate need of forty beds to serve its 8,000 and the 2,500 nearby.

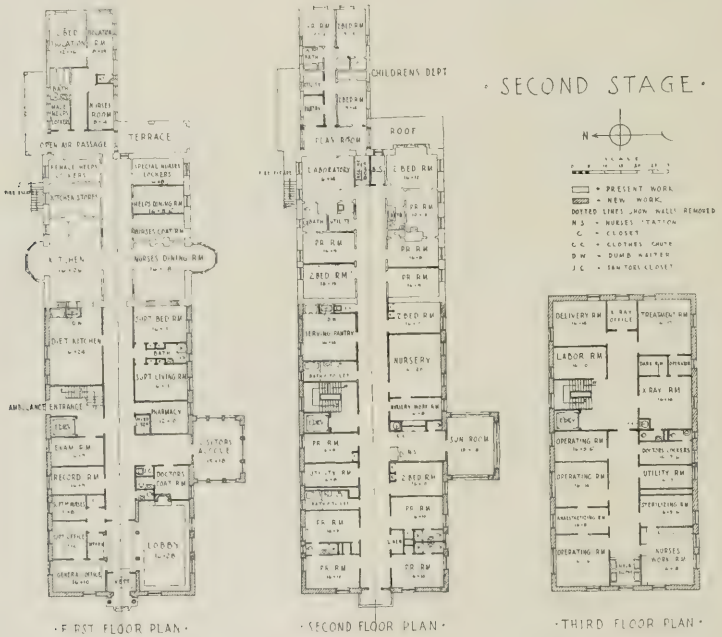
Unfortunately the donor neglected to leave any money for remodeling the house into a hospital or for its equipment and endowment. He wisely provided, however, that the hospital should be known as the Penult Hospital and not as a personal memorial.

While the survey indicated an immediate need of forty beds, it was deemed wise to give this to the community in homeopathic doses, rather than in allopathic. The architects were instructed to prepare sketch drawings for a completed development of between fifty to sixty beds with all necessary accessories of a complete hospital. The understanding was that it would be built in sections or units.

A survey of the property indicates that a start could readily be made in the existing buildings and could in time be used in the larger hospital. The budget of the first stage reads like this:—

removing rather than adding. Wainscoting, walnut, mahogany and pine, silk wall coverings, beautiful wall paper, elaborate electric light fixtures, marble fireplaces, a few scroll saw grilles, and much of a similar nature, had to go. The beautiful parquetry floors were generally left, though in toilets, etc., they too were removed and a tile floor substituted. The service wing of the house had soft pine floors and a new linoleum was added. A number of partitions and a few new doors were added.

As the cost of the first stage had been financed by a very few people the board felt justified in going to the public for a very much larger sum in



Remodeling house into hospital	$12,500
Equipment	10,000
Operating capital	2,500
Total	$25,000

The hospital with 16 beds and four cribs opened on Feb. 1, 1923 (See drawings, Stage I.) Within a very short time (October, 1923) it was badly overcrowded. The board had wisely appointed a wide-awake publicity committee who thoroughly "sold" the city on the needs for a larger and better hospital.

The first remodeling was a simple one; the 50 to 60 bed goal was never out of sight. New electric wiring was necessary throughout, some additional plumbing, but it was mainly a question of

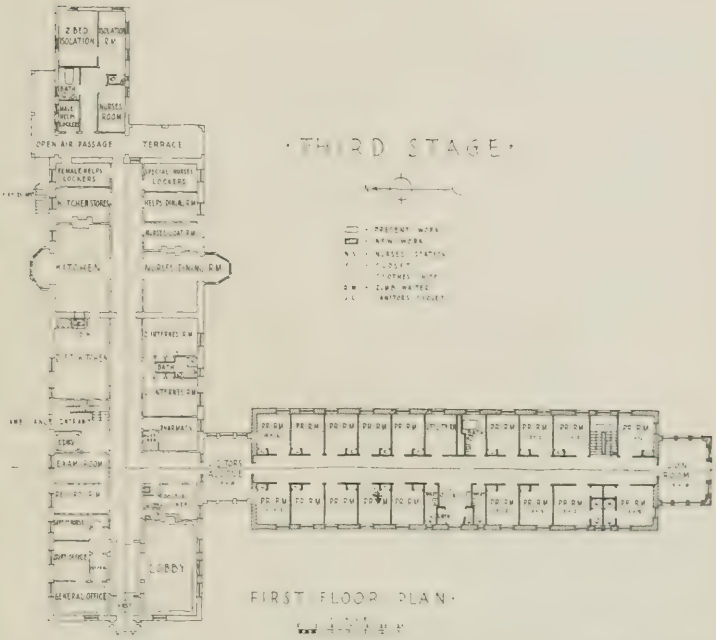
January, 1925. The publicity committee through its clever work had kept the town well informed as to the needs and after much hard work the budget of the second stage was raised. In addition to the construction of that work shown on the drawings (Stage II), allowance had been made for an addition to the old garage for new and larger boiler rooms (the old garage served as laundry throughout, the adjoining stable being converted into a linen and sewing and mattress sterilizing room at the third stage).

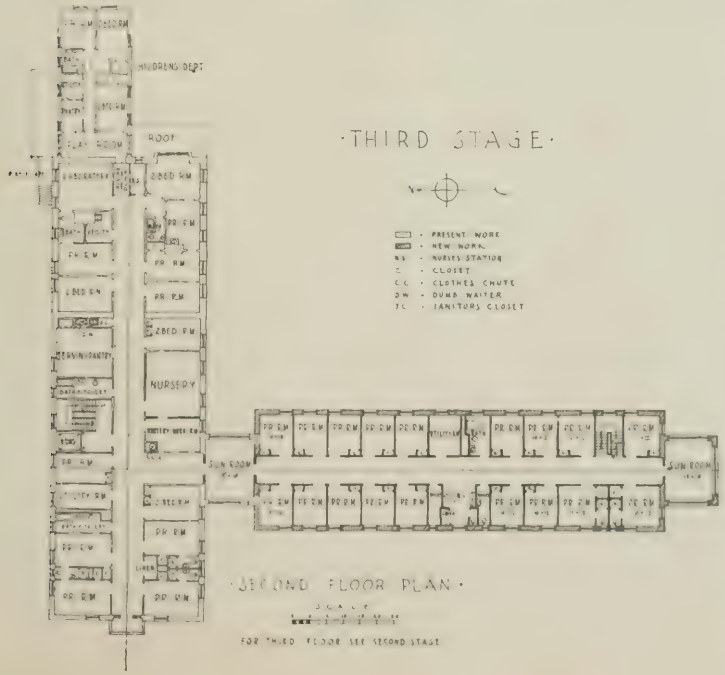
While the capacity was only increased to 33 beds the directors felt justified in the end results through this expenditure of $150,000 for buildings and $10,000 for equipment. The in-

creased facilities for better work in both diagnosis and treatment which this building permitted made increasing demands for beds.

Before yielding to the demand for additional patient beds (always insistent), the directors felt justified in establishing a training school for nurses. A public spirited woman living nearby donated her splendid home. No alterations were immediately necessary.

At times the hospital was taxed to the utmost; by 1928 the private rooms were almost nonexistent, being used most of the time as two-bed wards. During these years the publicity had continued and the directors were untiring in interesting their friends, with the result that many bequests had been left the hospital. As the hospital was almost self-sustaining they were set aside as a special fund. A new building was a dire necessity. This one, however, would be largely devoted to patients, as the accessory departments were already amply provided for. Ninety thousand dollars was needed for buildings, $10,000 for equipment, $25,000 for an addition to the nurses' home and its equipment. The special fund had reached $25,000 when a bequest of $40,000 more was received. The year 1928, however, seemed a poor one to raise further money, and it was not until 1929 that the directors again appealed to the public. By 1930 the buildings were completed and occupied.





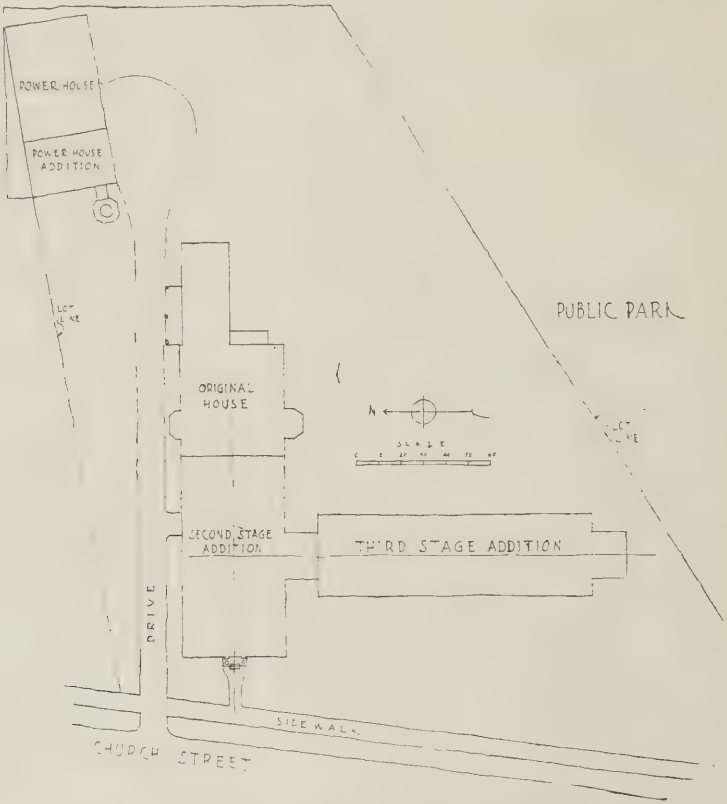
The retiring president in his annual and valedictory report summarized the activities as follows:

"The work is not complete, for there are many activities related to the hospital work that should be undertaken. These I shall not touch upon here for you well know my thoughts on these extra-mural activities. Physically the plant stands among the very best. Its cost in dollars is a

poor measure but in this my final message it may be well to summarize:

The first stage—building	$12,500	equipment	$10,000
The second stage—building	150,000	equipment	10,000
The third stage—building	115,000	equipment	10,000
The total—building	$227,500	equipment	$30,000

We have as a result a hospital of 59 beds, (exclusive of nursery) a nurses' home of 35 beds, a helps' home of 15 beds, and an actual valuation of properties and buildings of over $500,000.



Plot plan of the development of the mythical Penult Hospital

"This yard stick of dollars is a poor measure; we have created immeasurable values for the community. Who shall say how many lives have been saved by the hospital, how many prolonged? Who shall measure the value of the education which we have given our girls in the nurses' training school? Who can measure the gain to the public of the improvement of the diagnostic and therapeutic methods of our doctors through the facilities of the hospital and its aid in avoiding slipshod methods? We may well be proud of the fact that we have been able to care for every case coming to the hospital during the year without any overcrowding, for that means that insofar as is possible we have taken care of all sickness in the community requiring hospital care. Corroboration of this may be found in the reports of the Medical Society which recently surveyed the town carefully."

More might be extracted from the report of the retiring president, but for this the reader is referred to Vol. 7, pages 8 & 9, of the Penult Hospital Association for the year 1930.

PRIZE FOR CANCER RESEARCH

Dr. Sofie A. Nordhoff-Jung, member of the staff of Georgetown University, Washington, D. C., has founded an annual prize of $500 bearing the title of the Sofie A. Nordhoff-Jung Cancer Research prize. This prize is destined for the encouragement of researches in the etiology, prevention and treatment of cancer. It will be awarded by a commission, composed of members of the University of Munich, Bavaria, and will be granted for the first time in December, 1923.

The commission consists of Professors Borst, Dooderlein and Sauerbruch with Professor von Romberg, as chairman. This body is empowered to elect successors. The award will be made as a recognition of the most conspicuous work in the world literature bearing on cancer research, done at a time antecedent to the allotment of the award.

To be a good traveler argues one no ordinary philosopher. A sweet landscape must sometimes atone for an indifferent supper, and an interesting ruin charm away the remembrance of a hard bed.

GENERAL PRINCIPLES IN PLANNING DISPENSARIES

By MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary, Committee on Dispensary Development, New York, N. Y.

SHOULD a dispensary be more than one story high?" asked a questioner at last September's meeting of the American Hospital Association.

"Where should the x-ray department be located?" asked another. The inquirers seemed disappointed when their queries were not answered categorically.

A well-known hospital executive pointed out that the height of a dispensary would depend on the expected number of patients, the size of the plot available, the land values, the kind of medical work to be done, and other factors; that the location of the x-ray department, likewise, would be influenced by the amount and kinds of work expected for bed patients, ambulatory patients, etc. In other words, there are no prescriptions for planning a dispensary or a hospital. There are, however, certain principles of which those who design institutions should have a fundamental grasp. Then a study of the problems that the particular institution must solve, and the conditions under which its work must be done, will reveal how the principles should be applied. An institution thus planned may stand as a monument to intelligence rather than to imitation.

Although dispensaries have increased enormously in recent years, and recognition of their medical and economic importance has advanced apace, their development is so new that they are as yet far from having arrived at principles of organization or construction which can be regarded as final. It is probably true, however, that some principles can now be formulated, at least as a working basis, and those outlined in this article are offered only in this tentative way.

Uniting Dispensary and Hospital

1. *Unification:* uniting the dispensary as intimately as possible with the hospital. Out-patients frequently become bed cases. Vice versa, the hospital case should often be carried on as an out-patient case for continued care after discharge from the ward. In-patient service and out-patient service are not two different kinds of service, but two aspects of treatment of the same patient, often at different stages of the same disease. Yet too often the hospital and the out-

The entrance front of the new Boston Lying-In Hospital, a ninety-bed institution of recent construction. The building is of brick and cast concrete. Coolidge and Shattuck are the architects.

The new sixty bed hospital of the Soldiers and Sailors Home at Milford, Neb., plans for which were drawn by Architects Davis and Wilson.

patient department are virtually two institutions with no relation between their staff organization and records, with little or no common administrative procedure in the management of patients, and with no planning of the building such as would indicate or facilitate the close relationship that ought to exist. This principle of unification is now recognized as a fundamental desideratum in the organization of a medical institution. It has many practical applications to the plan of the building.

Detail of the portico, Hospital of the Soldiers and Sailors Home, Milford, Neb.

The admission of patients to in-patient department and out-patient department should be centralized as far as possible. It is not practicable, of course, to have stretcher cases come through the same door as the ordinary walking case; nor is it usually thought well to have private patients use the same entrance as ward patients. The admitting work for the wards and the out-patient department should, however, be unified as an organization, and should be brought into as close physical juxtaposition as possible. Similarly with the record system, all the records of each patient should, if possible, be brought together, ward and out-patient records both. Even if the in-patient and the out-patient records are not thus united, it is still desirable to have the room or rooms for the records of in-patient and out-patient departments physically adjoining, if not the same. More expert filing and control of records is thus procurable for less money.

Again, in planning the laboratories and x-ray facilities of the institution, it must be recalled

Pekin Public Hospital at Pekin, Ill., is an eighteen bed institution recently erected at the cost of $40,000. Hewitt & Emerson are the architects.

that where there is an out-patient department, a great deal of work of both laboratory and x-ray department will be required for ambulatory cases. Certain patients must be sent personally to the laboratories, while for other types, only specimens taken in the out-patient department need be transmitted. It is therefore important to locate the x-ray department and certain laboratories so as to render them conveniently accessible to both in-patients and out-patients with minimum crossing of lines of traffic, and with the minimum travel for both groups of patients. Certain therapeutic services such as electrotherapy and hydrotherapy are chiefly used for ambulatory cases, and should be located in accessibility to both the out-patient department, and to the hospital. The dental service, which is needed for most hospital cases, and which (except for a relatively small proportion of operative work) is essentially an out-patient procedure, should be made a part of the out-patient department. With some cases, of course, the dental work must be done while the patient is in the ward. It may be added that small supplementary laboratories are often desirable in the out-patient itself, as for routine urine examinations in a medical clinic.

This principal of unification will be at once challenged by those interested in dispensaries unattached to hospitals. It seems to imply that the unattached dispensary has no reason for existence. That is not true; but it is true that the un-

Detail of the entrance, Pekin Public Hospital, Pekin, Ill.

attached dispensary cannot do certain types of work in diagnosis or treatment that the out-patient department of a hospital can and should perform. Space does not here permit going into the problem of the unattached dispensary further than to indicate that the lack of relationship with a hospital imposes definite limitations upon the scope of work. These limitations, when properly defined, will be reflected in the planning and equipment of the institution.

2. *Provision of adequate space for administration.* As brought out in an article on "Some Common Mistakes in Planning Dispensaries," in THE MODERN HOSPITAL for December, 1922, one of the most common defects in dispensary buildings is the small space allowed for administrative purposes. The out-patient department and the unattached dispensary receive numbers of patients who, not being fixed like bed cases, require to be received, conferred with, and "routed" from one place to another before they are finally face to face with the doctor in the clinic. Adequate space for the reception and admission of patients, for records and for record storage, and for the officers is essential. An important application of this principle is that within every clinic subdivision (medicine, surgery, and the specialties) space should be allowed for the work of administrative assistants to the doctor—clinic executives or secretaries, paid or volunteer. This means desk space so located as to be most useful to the physician for the prompt and courteous reception, movement, and instruction of patient.

Space for social service requires a central office and (in a large dispensary) space in various departments of the clinics where private conferences with patients can be held. Broom closets and slop sinks in at least one place on each floor, a covered vestibule for baby carriages, ample wall sockets for electric connections and storage space for frequently used supplies, are among the administrative conveniences the importance of which is often realized after they are found to have been forgotten; likewise with provision near the admission hall for the detection and temporary isolation of contagious cases.

3. *Sanitation:* light, air, ventilation, adequate sanitary conveniences for patients and working staff. Out-patient departments are still associated with the basement. Dispensaries are young things as yet, but as they grow, let us hope they will grow up, that is, up out of the basement! It is well to suggest that the problem of ventilation is not the same in the out-patient department as in the wards. The out-patient is in one room but a few hours, and rooms can be flushed with fresh air between clinic sessions. It is desirable to have means of artificial ventilation combined with the use of windows with draft deflecting mechanisms.

The free opening of windows during clinic sessions being impracticable because of drafts upon half-ill persons, or patients stripped for examination, means of artificial ventilation are essential. Interior corridors cannot be ventilated adequately from adjoining examining rooms.

Providing Privacy for Patients

4. *Individualization of the patient.* The old type of dispensary had many large rooms in which patients sat around. The doctor went from one to another, or more frequently called them to his desk, gave them a look over and a prescription. Present-day standards require individual attention to each patient corresponding to practice in

The Brown Memorial Hospital at Conneaut, Ohio, was opened on April 13, 1922. The site was donated by W. H. Brown as a memorial to the Brown family whose home it had been more than a century. The citizens of Conneaut and the surrounding country raised $100,000 for the remodeling of the building.

private offices. Provision for the individualization of patients means such practical matters as the following:

(a) In large out-patient departments special waiting rooms for each clinic or group of related clinics (unless corridors are so located in relation to the examining rooms that patients can wait on chairs or benches there without crowding).

(b) Small examining rooms or booths for history taking, physical examination, etc., in such departments as medicine, neurology, pediatrics, gynecology, etc., and cubicles or booths for such special work as ophthalmology or laryngology: each unit just large enough for one patient and doctor with the necessary assistants. (See article in THE MODERN HOSPITAL, December, 1922, page 490.)

(c) The principle of individualization of patients also requires the rooms to be so planned that an executive assistant can control the intake and outgo of a considerable group of patients from a single point. This means saving a large amount of doctors' time from non-medical duties for medical work. The number of patients for each clinic executive varies, of course, with the nature of the work, being much larger in a throat or skin department, for instance, than in medicine or psychiatry. It is not necessary for small departments to be separate administrative units from the standpoint of clinic management. A single clinic executive may be sufficient for several departments or subdepartments which have medical independence of one another, but are put in conjunction as administrative units. Entrances and exits from and to corridors or waiting rooms and dark space for the clinic executive must be planned accordingly.

In general, it may be said that dispensary planning involves the engineering of many movable units through many interrelated processes, and is more akin to the planning of a factory or department store than of a hospital or a school. A combination of the points of view of the architect and of the engineer is required. For example the proper proportioning of waiting space to examining space involves consideration of many factors, not only areas but also number and rate of movement of patients in the various types of clinics.

5. *How determine size of building needed?* The effective capacity of an out-patient clinic, unlike that of a hospital, is not determined chiefly by floor space or cubage. The number of hours per day during which clinics are in session is a very large factor in determining the number of patients that can be received and treated. In planning a hospital the cubic capacity and floor space required can be estimated fairly closely once the number of beds is known, but in out-patient work, the floor space merely limits the peak load, or maximum number of patients that can be received and treated within a given short period of time such as the busiest hour of a working session.

A most attractive building is the new Jane Lamb Memorial Hospital at Clinton, Iowa, plans for which were drawn by Schmidt, Garden and Martin of Chicago. The building was dedicated in January, 1923.

In large measure the working hours of out-patient clinics have had to accommodate themselves to the hours which could be most conveniently given by doctors. When all of the staff in all departments wish to give their services at the same time, and it is therefore necessary to receive all out-patients within a single daily period of from one and one-half to two and one-half hours, much more space is necessary for the same number of patients than if the working periods covered five or six hours of the day and evening. Obviously, conflict often exists between the hours most convenient to an unsalaried out-patient staff and the working hours which would conduce most to the economical construction and utilization of the dispensary plant.

In answering the inquiry above, in the case of any new institution the following order of questions may be considered:

(a) From the standpoint of service to the public, what are the desirable working periods?

(b) During what periods can we secure medical service in the various departments?

(c) What departments from their medical nature need to be working at the same time?

(d) What is the maximum number of patients then to be expected during the busiest hour of the day? The capacity can then be planned to carry this peak load.

Proceeding by this method may make it possible to secure a wider distribution of clinic sessions during the working hours, and thus diminish the size of building necessary to carry a given total of patients. In deciding how many different departments, medical, surgical and special, need for professional reasons to be in operation at the same time, it must be borne in mind that the demands of diagnosis are not the same as those of therapeutics. The establishment of diagnostic divisions may sometimes be a useful expedient rendering it possible to bring together all the essential consultants at one time, to deal with a limited group of picked cases, while relegating routine treatments to other hours. In many institutions it is possible to apply this principle only in a limited way, as yet, because with unpaid medical staffs, the hours which doctors prefer are often the finally determining factor. But it is well to have tendencies in mind and to make use of them as far as local conditions permit.

Arrange Specialties in Administrative Units

6. *Planning with reference to clinic departments.* The number of special departments to be installed is an important factor in planning both building and equipment. A dispensary receiving sixty patients a day with fifteen different clinical departments, seven to ten of which are running at the same time, is subdivided too much. The reason often is that it is easier to secure volunteer medical service when the title of chief of a department can be given. Specialization of work can go on by the assigning of special types of cases to individual doctors within a suite of rooms which, however, are one administrative unit, as above suggested. The number of different departments should generally be within the number of specialties which are definitely recognized in the local medical practice. In small communities, this means that there will be fewer specialties, except from occasional visiting men. The principle to be followed is that the number of clinical administrative units as defined above is to be governed not by the number of different specialties or subspecialties recognized in the medical organization, but by the number and types of patients to be handled. The grouping of specialties into administrative units saves in expense of construction and maintenance.

7. This leads to another principle, that of *flexibility.* It is often possible to utilize the same rooms over and over again during a week for different types of clinical work. The planning and equipment of out-patient clinics requires the consideration of two main types of service, medical and surgical. Under the medical type falls general medicine and various subdivisions (e.g. cardiac, tuberculosis), pediatrics, psychiatry, neurology, dermatology, etc. The type of rooms for history-taking and examination is similar for all these, and the difference in fixed equipment required is not great. The size of these different departments and subdepartments will determine how far the same rooms can be used at different times by more than one specialty. But it is important to plan the suites so that there will be the maximum amount of flexibility. In the surgical group flexibility is not so easily obtained since much more is required in the way of special equipment in surgery, gynecology, genito-urinary, orthopedics, dentistry, etc. Yet even here certain combinations and economies are possible in some instances. For example, a suite of four rooms opening off a common corridor may have the two center rooms equipped with simple examining tables; one end room with an examining table for the ordinary gynecological examinations, (general surgery, gynecology, and genito-urinary divisions may all use such a suite), and the fourth room for cystoscopy. In so far as the principle of flexibility can be applied it obviously promotes economy of construction and also renders the building more adaptable for unforeseen future changes.

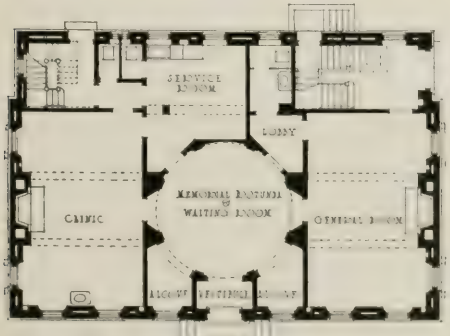
Efficient Location of Equipment

8. *Planning and location of equipment on an efficiency basis.* Very detailed planning of the location of examining tables and therapeutic equipment in relation to natural and artificial light conduces vastly to the doctors' ease in work. Much has been done in recent years in planning hospital wards to minimize the number of steps to be taken by nurses, but little as yet in out-patient clinics. Once the general layout of an out-patient department has been determined, detailed consideration should be given in the medical type of clinic to a typical unit in which the doctor's desk or history table, the examining table, wash basin, etc. shall all be so located as to minimize time and effort for both doctor and patient.

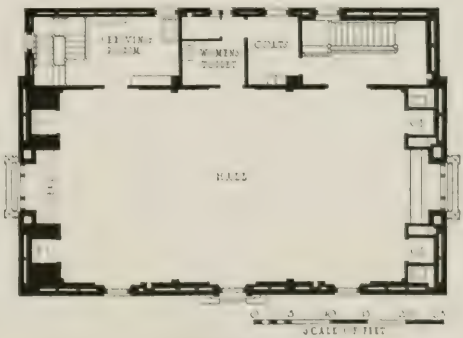
Similarly with the surgical group, as in throat or eye clinics, a typical booth should be worked out. The tastes and habits of individual laryngologists, for instance, have to be considered, and demands for fixtures as well as for instruments

The Pinkham Memorial Clinic for Babies at Salem, Mass., is of 1922 construction. It is purely for the use of out-patients, and has no beds, private rooms or ward service. Haven and Hoyt are the architects.

may differ, but if the matter is approached from the standpoint of planning the most efficient arrangement for all, agreement can often be reached in advance, with economy and efficiency as the result. Much detailed standardizing work of this sort ought to be done in the near future. Of late years, thousands of dollars have been spent to plan the locations of factory machinery, the interrelations of departments, the details of industrial equipment, so as promote the greatest efficiency in production. To plan similarly the physical basis for the life-saving work of the doctor offers no such opportunities for financial profit as does planning for commerce or industry; yet may it not also inspire the imagination of the architect, the administrator, and the engineer?



First floor plan



Second floor plan

SMALL HOSPITAL MORGUE AND AUTOPSY ROOM

By RICHARD RESLER of Resler & Hesselbach, Architectural and Consulting Engineers, New York, N. Y.

BASED on an extensive investigation of numerous hospitals of varying bed capacity, it appears to the writer that there is a pronounced disposition to relegate the planning of the hospital morgue and of the autopsy room to third place, although this department is one of the most important and interesting of the entire institution.

The morgue and autopsy room have been found in every conceivable part of the basement or ground floor, with no mortuary refrigeration, with inadequate facilities for research work and with inferior illumination and ventilation. In fact this department frequently has been overlooked entirely.

Autopsy Findings Essential to Progress

As autopsy findings are the prime means of obtaining knowledge of the causes and the progress of disease, it would seem that it is of the utmost importance to interns and to attending physicians and surgeons that proper and adequate facilities be provided for them to prosecute their studies anatomically. Should the morgue and the autopsy room be dark, poorly ventilated and without modern conveniences, this department will be a neglected place in the institution, with subsequent retrogression in the technique of the personnel.

Advance in the technique of diagnosis, through facts brought out by autopsy conclusions has been more pronounced in Europe than in this country, owing, no doubt, to the fact that institutions in Europe have been vested with authority to perform autopsy in nearly all cases. It seems to the writer that facilities for autopsy should be embodied in all modern institutions; otherwise progress in diagnosis will be greatly retarded through want of opportunity to study the effects of various treatments upon organs and tissues.

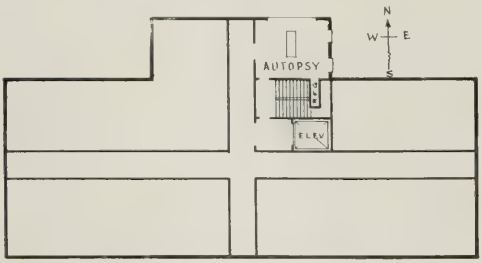


Diagram of a combined morgue and autopsy room suitable for a hospital of thirty-five beds.

The magnitude of this department is dependent largely upon the bed capacity of the hospital. There is no valid reason, however, why these facilities cannot be embodied in the plans of even a small institution, in which case the morgue and autopsy can be combined in one room.

It frequently appears that this department has been provided for in some out-of-the-way place, ignoring such important factors as proximity to the elevator and convenient means of removing bodies from the hospital. Furthermore the morgue and autopsy room should be so located as to permit the transmission of bodies to this room with a minimum chance for observance by patients and visitors.

Should be Located Above Grade

In order to obviate the permeation of the section of the building, wherein the morgue and autopsy room are located, with the odor peculiar to this department, the room should, if possible, be located in a corner to permit of cross ventilation. It is the writer's opinion that the morgue and autopsy room should be treated similarily to an operating room with abundant north light, artificial illumination, and strict sanitary details in order to facilitate cleaning. This would naturally require that the morgue and autopsy room be located above grade, which in a number of cases due to local conditions of site is impractical to accomplish. There is no basis, however, for locating this department below grade to the extent that it has been so placed, except that hospital planning formerly did not receive the study it does today.

The accompanying diagram indicates a convenient and practical location of a combined morgue and autopsy room in a small institution of approximately thirty-five beds.

In addition to the factors of adequate daylight and artificial illumination, ample mortuary refrigeration must be arranged to permit easy transfer of bodies from refrigerator to the autopsy table for diagnostic purposes. The capacity of the refrigerator will depend upon the size of the institution. This refrigerator should be of the sliding type with a movable carriage and removable tray, so arranged that the body may be withdrawn either partially or wholly for identification or inspection purposes, while the tray remains in a horizontal position without vertical

support. This refrigerator can be equipped with either ice compartments or brine coils.

In a large institution where the morgue and autopsy rooms are adjacent, the mortuary refrigerator should be located between the two rooms, allowing access to either end.

As to the finish of such a department, it would seem highly desirable to use a light tone tile floor finish, sanitary base and wall wainscot extending up to the ceiling cove. The floor should slope easily to a flushing floor drain. A deep washup sink should be furnished for the use of the pathologist as well as a deep sink with an integral drain board for washing anatomic parts, all conveniently arranged with regard to the autopsy table. Space should be allowed for an instrument and drug cabinet. Built-in blackboard and charts are a great convenience. In a large institution an incinerator should be provided.

The new Dickeson County Memorial Hospital at Abilene, Kansas

Requirements of an Autopsy Table

The autopsy or post-mortem table should be situated advantageously with regard to the light. There are a number of types of tables made by the various plumbing houses, from the old style, marble-top table to the modern enamel iron, the relative merits of which have created a great diversion of opinion among members of the profession. From the writer's investigations he has concluded that the following requirements are essential of such a table:

A metal band grating (so reinforced that it will not spring) over the entire table set at least four inches above the table top proper. This grating should have a mesh coarse enough to permit the easy passage of liquids but fine enough to prevent the passage of small instruments or anatomic parts and tissues. The grating should be easily removable.

A sufficient depth to the table to minimize the inconvenience of an overflow.

Ample and convenient table space for dissecting tissues.

A surface that can be easily cleaned.

Ample water facilities with hose readily controlled.

Convenient access to drain and trap.

In some institutions, fans for ventilation have been located under or at the side of the table in order to draw off the odors which are usually present. The ventilation factor in a large department requires thorough study and is governed greatly by local conditions.

This paper is presented for the purpose of stimulating the study of the morgue and the autopsy room which, in the writer's opinion, are of great concern in hospital planning, and with the hope that such facilities will be embodied in all our modern institutions, particularly those in the outlying districts. The results should be far-reaching.

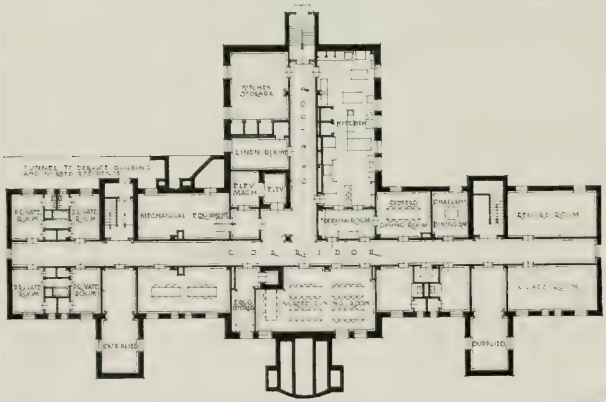
WILL NOT NAME DIRECTOR OF SOCIAL WORK BUREAU

Following the resignation of Miss Ida M. Cannon as director of the Service Bureau on Social Service, the American Hospital Association, through its board of trustees, has voted not to fill the position of director for the year at least. The action was prompted by the fact that the American Association of Hospital Social Workers now has a full-time executive secretary and facilities for carrying on such work.

You are to come to your study as to the table, with a sharp appetite, whereby that which you read may the better digest. He that has no stomach to his book will very hardly thrive upon it.—Earl of Bedford.

ST. JOSEPH'S HOSPITAL, MITCHELL, S. D.

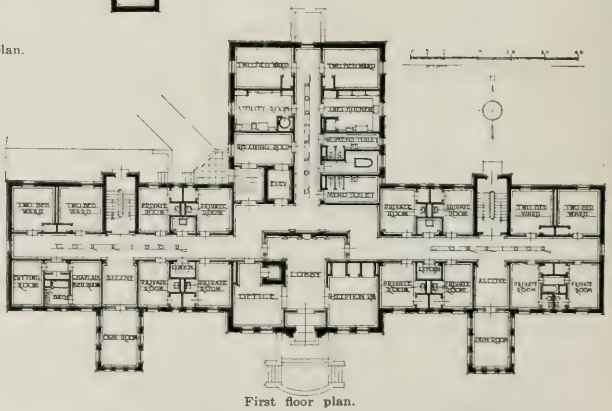
General exterior view.



Ground floor plan.

Architect Edwin H. Lundie planned the new St. Joseph's Hospital which was opened last year. The institution, exclusive of furnishings and equipment, cost $225,000.

The Sisters of St. Joseph, who operate the hospital, declare that its operating cost is from $2.50 to $3.00 per bed per day. Laundry, power plant and nurses' residence are in separate buildings.



First floor plan.

Second floor plan.

Fourth floor plan.

Third floor plan.

CUTTING THE COST OF INSTITUTIONAL SERVICE

By CARL E. McCOMBS, M.D., National Institute of Public Administration, New York, N. Y.

RETRENCHMENT is today's most popular word in the lexicon of the taxpayer. All over the country citizens are showing signs of uneasiness because of the steadily mounting tax burdens which they are called upon to shoulder. They hope always for a reduction of taxes but that hope seems vain in view of the increased responsibilities which the citizen himself has compelled and is compelling government to assume.

WHAT ABOUT THESE COSTS?

The cost of an unsuitable, uneconomic location of the institution.

The cost of failure to provide for future expansion.

The cost of upkeep in bright metal work, beautiful lawns and drives, spaciousness and fine vistas.

The cost in labor turn-over of dingy, badly furnished quarters for employes.

The cost of imposing structures which fail to guarantee health, comfort and convenience to the patients.

Dr. McCombs points out these often neglected opportunities in decreasing the cost of institutional service.

In a recent article in the *National Municipal Review*, Lent D. Upson, director of the Detroit Bureau of Government Research, shows that the government of the city of Detroit took on seventy new activities, in the period 1910 to 1920. The population of the city in this period was doubled, but the tax burden was increased to five times its former proportions and the city debt was multiplied by ten or fifteen. What has happened in Detroit in the past ten years has happened in almost every city and state, though not perhaps to the same degree. It would appear that as long as citizens continue to demand more service from government, they cannot expect lower tax rates. They have, however, a right to demand that the governments which represent them shall guarantee service benefits commensurate with service costs. This is what retrenchment must mean.

No one familiar with the astonishing progress which government in this country has made toward the prevention of disease and the promotion of human welfare would argue that government ought to abandon any of its activities in these lines, but if government were to return to the expenditure basis of ten years ago many of its most productive services for the protection of human life and social betterment would have to go by the board. If one analyzes expenditure of state and municipal governments during the past ten years he cannot fail to be struck with the fact, that with the possible exception of education, no other governmental activity or group of related activities shows a more rapidly increasing cost than institutional service. This is particularly to be noted of governmental activities in the more recently organized states, where government has from its beginning been obliged to take upon itself responsibilities which in the older states were assumed by private philanthropy In the older states we find many of the most important charitable, correctional and educational services still supported and administered by private agencies.

Since state administration of institutions for the care of the dependent and defective, hospitals, homes and sanatoriums shows relatively fewer variations from type than are observed in city administration, we shall refer in this article chiefly to the former. In the majority of our states administrative responsibility for these institutional services is vested in a board or in several boards. In many states two tendencies which should be noted have been apparent within recent years. The first is the tendency toward consolidation of all institutional services under a single administrative agency, such as a board of control. The second tendency, which is of more recent appearance, is toward elimination of boards of control and the centralization of administrative responsibility in one person. It is not our purpose to argue the advantage or disadvantage of these types of institutional administration. It should be said, however, that the board plan finds more favor among the majority of public officials and among the people generally who quite democratically fear "one man power." Support for the single executive plan is furnished chiefly by the "theorists," of which the writer is one, who believe that fixing responsibility on one full-time, experienced officer is more certain to promote efficiency than dividing responsibility among several part-time, comparatively inexperienced persons.

But no matter which side of this argument one may take, it will be conceded, I think by all, that there has not been the improvement in the admin-

The new Psychopathic Hospital for Criminals at Spring Grove, Md., plans for which were drawn by Architect Henry P. Hopkins. The institution provides quarters for ninety patients and the building proper cost $90,000.

istration of public hospitals, homes and sanatoriums which the extension of governmental responsibilities warrants. With practically the same administrative machinery, which twenty years ago was responsible for spending thousands of dollars for institutional services, many state governments are now spending hundreds of thousands of dollars. In perhaps a majority of states we still find boards of administration or control made up of citizens "of probity and wisdom" who are scattered throughout the state, meet only occasionally, none of them with special knowledge of institutional problems, and without the service of consulting technical experts who can advise them on such matters. When a new institution is to be built or an old one altered to meet some new situation, the usual practice is for the board to designate an architect, and with his assistance prepare the necessary plans. Quite often the knowledge of the architect about the requirements of the proposed service is as superficial as that of the members of the board. Even though the board may have within its jurisdiction thoroughly competent institutional executives it is unusual to find them called in to give advice.

That this situation is not an uncommon one is evidenced by a recent editorial in The MODERN HOSPITAL (November, 1922): "Many

Detail of the entrance to the new Psychopathic Hospital for Criminals

superintendents of small hospitals are working in buildings that are ill adapted to the institution's purpose. The laboratory is poorly located, the diet kitchens are too small, there are too few closets, the store room is difficult to get at. How often have we heard these superintendents express the wish that they might have an opportunity to cooperate with an architect in the planning of an efficient small hospital." The situation here described, which evidently has reference to hospitals under private control, applies with equal or greater force to hospitals and other institutions under public control.

In Danger of Cut in Appropriations

Since the retrenchment programs of governments must concern themselves chiefly with the elimination of waste in public expenditure and must have as their main objective the development of a system and a practice of administration which shall guarantee the citizen, not necessarily lower taxes, but rather better service, it is of paramount importance that those concerned with the development of institutional services shall be prepared to cooperate to these ends. We have said that the establishment and maintenance of public hospitals, homes and sanatoriums is the largest item of expenditure of state governmental departments, with the exception of education. In some states expenditures for public institutions of this character are as much as one-third of the entire expenditures of government for its general departmental service. It is not at all unlikely, therefore, that a great deal of attention will be centered on this field of public service by those demanding retrenchment. Unless public institutional boards or other administrative agencies are prepared to show a real interest in the problem of eliminating waste, they may find the axe applied to their appropriations in such an unreasonable way that many vital activities will suffer.

The writer is neither an authority on institutional planning nor an expert on institutional administration. As the result of ten years' study of the administration of public institutions together with a few instructive experiences in helping to plan them, he has, however, made certain observations and formed certain opinions about institutional planning in its relation to cost which have convinced him that there are many neglected opportunities to decrease cost and at the same time improve rather than impair institutional service. He has no standardized forms, schedules or outlines to offer for the guidance of those concerned with these matters, but purposes merely to show by illustrations from his own note books where some of these opportunities are and to suggest how advantage may be taken of them.

The commonly accepted basis for comparison of costs in hospitals, homes and sanatoriums having like functions is the patient-day or inmate-day cost. The value of this index for determining the relative dollar efficiency of institutions so compared is, however, almost negligible since it is impossible to appraise by statistics alone many of the more important but hidden factors which contribute to such cost. Even with all the collateral statistical information which the most comprehensive system of institutional bookkeeping affords, inference based on statistics is more than likely to lead one into error. The cost of an unsuitable, uneconomic location of the institution; the cost of failure on the part of those responsible for its planning to prepare adequately for inevitable readjustments to meet increased or new service demands; the cost in health and well-being of inmates because of failure to provide plant and equipment which affords maximum opportunity for physical and mental rehabilitation; the cost of maladjustment of plant and equipment to employment needs and employes' welfare so that there is high labor turnover, high labor cost with reduced efficiency and low morale among employes; these are cost factors which cannot be measured satisfactorily by statistics alone. There are doubtless many more such intangible cost factors which the experienced institutional administrator can name.

A board, let us say, is charged by the government with the responsibility of developing an institution of a certain type. We will assume that there has been a thorough study of the community need for such an institution and that all the facts as to numbers, age, sex, distribution of prospective patients or inmates, treatment or custodial program essential, etc., have been made available to the board by competent investigators and advisers. To assume this is, of course, to ignore the fact that in the majority of instances public boards of administration neither have this information nor make any real effort to get it. But crediting the board with complete knowledge of all the facts necessary for intelligent planning, its first problem is to select a location for the institution which will best serve the purpose. At this point the board needs to be particularly well-advised and well-informed. An architect should be called in to assist the board in surveying prospective sites. If he is a competent architect and, at the same time familiar with institutional construction and general service requirements, his advice will certainly be helpful. An engineer with thorough understanding of the problems of water supply, sewage disposal, drainage, etc.,

should make a careful survey of local conditions affecting such matters, and with the architect should go carefully over the location, appraising it as to possible costs of excavation and fill, drainage, use of local materials for construction, extent of landscaping operations necessary, area and suitability of land for farm and garden purposes, if such projects are contemplated. Careful study should also be given by competent persons to the relation of location to institutional needs with respect to transportation of persons, supplies and materials, and to climatic conditions such as annual rainfall, hours of sunlight, fogs, mists, etc. All this and other related information should be made available to the board so that it may weigh the advantages and disadvantages of each site and select that one which is best suited to the aims of the contemplated service.

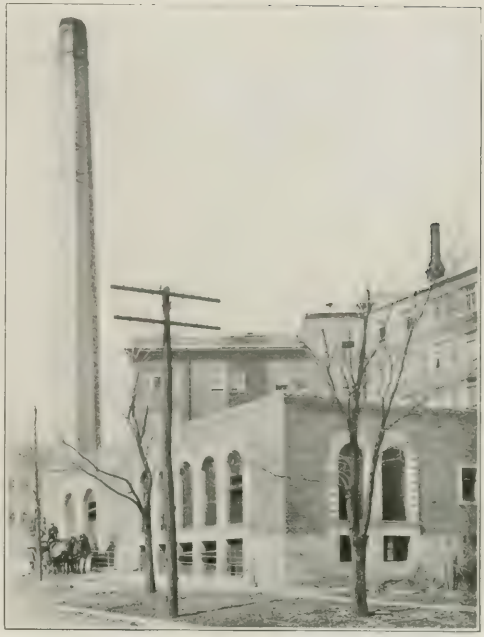
Politics Often Determines Site

Time and again one sees institutions which have apparently been located without consideration of any of these matters. In many instances the failure of a board to select a satisfactory site is traceable to political manipulation. When a state government proposes to build an institution, there is often strife between local political delegations or groups, each seeking to have the institution established where it will give its own particular constituency material advantage. It is a splendid thing for the business of a small rural community to have a state hospital or home nearby, but it is never satisfactory for the state to permit local interests to outweigh the interests of public service. Where institutions are located through or because of political influence, any such program as has been suggested for determining the most satisfactory site is impossible, of course.

But whether the cause of bad location is lack of information on the part of those responsible for selecting the site or due to political machination over which they have no control, the result is generally the same in high cost and low efficiency. A few illustrations of uneconomic location of public institutions will perhaps be illuminating.

Scenery But Not Accessibility

In a mid-western state a tuberculosis sanatorium for incipient cases only was established in the extreme western, mountainous section of the state. The majority of tuberculosis cases are, however, found in the more thickly populated eastern part of this state. The sanatorium can be reached by patients from the eastern part only by a long and exhausting ride on slow and poorly-equipped trains, and through train service cannot be had during the long winter season. The sanatorium station is only an unheated shack on the right of way and the sanatorium buildings are more than a mile from the station over a road which is bad at all times and well-nigh impassable in winter. The result is that many patients reach the institution's doors in a state of exhaustion. Some have died in transit. Once patients have arrived they must be received because there is no other place for them to go, and so many advanced cases throw themselves on the institution knowing that they must be cared for until they are well enough to be discharged or until death claims them. The result is that advanced cases have well-nigh crowded out the incipient cases for which the institution was intended.



The new power house and upper story addition, Madison General Hospital, Madison, Wis., which were planned by Architects Schmidt, Garden and Martin.

This has meant naturally quite a different type of service than was originally contemplated, and a much higher cost than would be necessary to carry out the original program. More nurses and more special equipment have been required for the advanced cases and higher food and service costs generally have resulted. This institution might have found a dozen sites more suitable, as good in environment, more accessible to patients and visitors, and less costly to develop. In this particular case, the scenic beauty and high altitude of the site selected outweighed all else in the judgment of those responsible.

In a western prairie state a site for an institution was selected without proper study of the suitability of the soil for agricultural purposes, although one of the primary aims of the proposed service was to train boys in agricultural pursuits. After the institution was built it was discovered that in the spring planting time so much farm land was under water that agriculture was impossible. Many thousands of dollars have since been spent in draining and improving this property, although in the very neighborhood ample well-drained farm sites could have been purchased at about the same price per acre.

Again, in an eastern state the board of trustees of a convalescent home selected the site for an institution to cost about a million and a half dollars without anything but the most casual survey of the property. After it had been purchased, a sanitarian was asked to make a survey, and it was then found that in order to eliminate mosquitoes and reclaim sufficient land to make the raising of garden products possible and profitable, about $100,000 would have to be spent in drainage of swamps and wet meadows. On the advice of an architect who assumed that water would be readily available whenever it was needed, no proper study was made of possible water sources before purchase of the property. In consequence, when water was wanted, it was found that an adequate supply could be obtained only with the greatest difficulty and at a cost which would have been prohibitive for an institution with smaller resources. This site never should have been purchased and would not have been had not the board been so charmed with the natural beauty of the spot that it forgot all else. A skilled engineer, after a day's survey, would have advised the board against purchasing the plot and would have saved the board several hundred thousand dollars in cost of development. Other and better sites were available on all sides.

One more illustration of incompetent institutional planning from the point of view of location is perhaps worth citing. A western state established a school for the blind on the outskirts of a small town of about 300 people with poor train service to and from the larger centers of population. The site would be an excellent one, perhaps, for a correctional institution wishing an isolated, rural setting with plenty of opportunity for the employment of inmates in agriculture, but as a site for a school for the blind it is decidedly lacking. It is too far away from the large centers to permit the inmates to take advantage of musical instruction and entertainment which is an essential part of their training. They are practically cut off from all the opportunity for social contact which urban society affords, and the narrowing effect of their affliction upon their lives is thereby enhanced.

The old adage the "you can't make a silk purse out of a sow's ear" is one which may well be pondered by those concerned in institutional development. An institutional site badly chosen is always a liability and though handicaps may be overcome if sufficient funds are available for the purpose, it is an imposition on the public to burden it with the cost of overcoming them. This applies as well to institutions supported by private philanthropy as to those supported by the public through taxation. The public pays, and dearly, in either case.

Plans Must Be Flexible

It is not easy, of course, to anticipate the nature or extent of all the demands which may come upon an institution, but at least, those who build should see to it that the plan of the institution and its contemplated service to the community shall not be so inflexible that the meeting of probable new or increased demands is impossible except at extraordinary expense. The experience of many institutions, particularly tuberculosis sanatoriums, in states where the community is as yet relatively unorganized for preventive work, is that the demand for service increases in direct proportion to the availability of such service and the education of the public in the use of it. It is very much like the situation in a great city where, with every increase of transit facilities, one finds increased use of all of them. In those states where private philanthropy has taken relatively little part in providing for the sick, many hospitals and sanatoriums have been built at public expense which, within less than five years, have been found to be wholly inadequate to meet the increased demand which a better informed public has made upon them. This does not imply merely that provision should be made for increasing capacity within reasonable limits, but also that the need for fixed equipment capable of furnishing service for a larger number of inmates should be anticipated.

The board of trustees of a convalescent home, starting with a small institution of about forty beds, built, on the advice of its architect, an expensive sewage disposal plant with a capacity sufficient for about seventy-five persons, although it was contemplated that the institution would within a few years be expanded to a much greater capacity. As more buildings were added the sewage disposal requirement was found to be far in excess of facilities available. Not only that, the plant which had been built was found to be badly located with reference to new buildings. To make matters worse, it was discovered that owing to the location of the plant and its manner of construction it could not be enlarged satisfactorily so as to provide for the larger number of patients. As the result a new plant had to be built at about three times the cost of the original plant. Several thousand dollars would have been saved if the board of trustees had sought the advice of a sanitary engineer familiar with institutional requirements and fully informed of the board's plan for larger development in the future.

In another state a one-building tuberculosis sanatorium was established as the beginning of a larger development. The engineering equipment, including heating, lighting and pumping machinery, was located in the basement of this building in a space which permitted no additions to equipment. To carry out the contemplated plan of extension of service will require the addition of heating and other engineering units for which no space is now available. This means that within a short time if plans for increased capacity are carried out there will have to be a new building to house the greater equipment. This might have been avoided, of course, by more careful study of the development program by engineering specialists.

Had to Tunnel for Communication

It would not seem necessary to comment on the wastefulness of a policy of institutional construction which does not give proper weight to consideration of the health, comfort and convenience of inmates, and yet all over the land hospitals and homes are being built, which though architecturally fine and imposing, fail to guarantee these benefits.

In a northwestern state where the winters are particu-

larly long and severe, an institution for the mentally defective was established on a large farm. With so much acreage available those responsible for construction saw no need of compactness of plan and so units for the segregation of various types of inmates were established at some distance apart. It must have been clear to anyone who thought about it at all that communication between buildings would be well-nigh impossible at times in winter, and for many patients a hardship at all times. This proved to be the case. Separate heating plants, separate kitchens and dining rooms, and other separate equipment necessary to make life comfortable for inmates of the isolated units had to be provided. Finally, tunnels were built at great expense in order to provide satisfactory communication of persons and the necessary service between buildings.

At this same institution, the buildings housing inmates, which were badly built to start with, are now dilapidated, unwholesome fire-traps, but instead of spending public money to provide healthful environment for inmates, about $200,000 was recently spent for a fine administration building and living quarters for the superintendent. The contrast between the light, cheerful, beautifully furnished administration building and the dark, dirty, disreputable quarters for inmates is distressing, to say the least. The cost of this institution is out of all proportion to the service which it renders and it will always be more of a public burden than a public benefit.

At a large and recently built general hospital in the west, the architect was called upon to provide a ward for mental cases under observation and temporary treatment. So, with the evident purpose of putting these undesirables as far out of sight and hearing as possible, he planned a ward for them in the basement which was about two-thirds below the ground level. The result is a low, badly-lighted, badly-ventilated, dismal ward which can certainly have no effect except a bad one on the treatment of the patients. Certainly, no one even moderately well informed about what modern treatment of this type of patient demands would think of approving such an arrangement. But there it is, from the point of view of service, a waste of public funds.

Often Fail to Consider Upkeep

The lack of consideration given to easily anticipated employment problems is one of the major factors in institutional cost and yet it is almost invariably the last one a board or architect thinks about. The average institutional architect, unless well advised by an experienced administrator, is almost certain to be carried away by a desire for beauty often at the expense of utility. In order to get fine lighting effects, he provides great window expanse of a type difficult to clean; he likes to put in bright metal work forgetting that to keep it bright requires the constant attention of cleaners and polishers; he favors spaciousness and fine vistas and so, where he can, he makes provision for it unmindful of the fact that employes at their work will be required to take many unnecessary steps; he likes splendidly landscaped grounds and is not concerned with the fact that the upkeep of beautiful lawns and driveways is likely to become a most expensive thing without adding in proportion to the service of the institution.

A large hospital covering more than a city block was built in a western city. It was an architect's dream, spacious, beautifully lighted and complete with all the niceties of equipment that architects' dreams include. But in this particular state, the eight-hour labor law was rigidly enforced. This meant three shifts for many types of employes. Long corridors meant many steps and consequent waste of employes' time. As the result of strict enforcement of the eight-hour law and the time lost by employes in their jaunts from one duty to another, there were about twice as many employes as would have been needed in a more compact institution.

We would not minimize the value of spaciousness, but certainly when an institution is to be supported at public expense, some consideration should be given to keeping labor costs within reason, and properly adjusted to local employment conditions.

In a public hospital in a western city the board of trustees gave a local artist carte blanche to decorate the institution with the work of his brush. He painted many pictures, more or less pleasing to the eye of patient and visitor, and these were framed and hung throughout wards and corridors. These pictures are, however, such splendid dust catchers that they require the constant attention of cleaners who might better be busy at more essential tasks. The benefit to patients derived from contemplation of these pictures is probably not worth the cost of keeping them clean. It is desirable, of course, to give hospital patients as attractive environment as is consistent with efficient service, but to clutter up hospital wards with things that look nice but make economic use of labor impossible is more often harmful than beneficial to public service. Either there is disorder and uncleanliness or there is an appearance of order and cleanliness at the expense of patient service in other lines.

Respectable Quarters for Employes

Relatively few public institutions are able to meet the competition of outside employers as regards salaries or opportunity for advancement. The former must, therefore, if they are to secure and keep competent persons and prevent high labor turn-over which is so costly, make up to the employe in other ways for low salary and poor promotional opportunity. This implies that the employe should have something more than a merely tolerable place in which to live and enjoy his being. No employe should be expected to be energetic, cheerful and loyal in service when he is required to spend his hours of rest in a dingy, badly furnished, unattractive room, with probably a sagging, worn-out bed which makes real rest an impossibility. Frequently his living quarters are so arranged that his work is always right under his nose. He is never permitted to feel the enjoyment that every normal person feels when he has an opportunity to put away work and all thought of it for a time. Often the rooms provided for him are somewhere at the back of the institution with an outlook on the stables, the garage, the kitchen or laundry. If there are noises

to be heard in the early morning hours it is his to hear them; if there are unpleasant odors he is almost invariably put where they will assail him.

An institution for mentally defective children in a western state was continually in difficulties because of the incompetence of its employes and the high cost of its service. Its answer to criticism of its inefficiency and extravagance was that it was not able to pay the salaries necessary to secure and hold trained attendants. But low salaries was not the chief reason for constantly changing inefficient personnel and resulting high labor cost. The real reason why decent, self-respecting, trained attendants could not be had was that employes were required to live under conditions which afforded no opportunity for enjoyment of work or rest. The living quarters of many were so located that they were not able to have relief from disturbance by day or night. Their rooms were equipped with patched and misfit furniture. No individual bath or toilet facilities were available to them and the common toilets and baths were a disgrace. No provision was made for their recreation beyond a sitting room which had no equipment except a few broken-down chairs, a phonograph and an odd lot of cracked jazz records. It did not require more than a few weeks of this kind of living to convince a good employe that the institution did not care much about making him contented, and so he stayed only long enough to find a better job.

The reader will quite likely think the case cited an extreme one. Possibly it is, but the situation described is not nearly as uncommon in many of its elements as it ought to be. Even some of the largest and most imposing public institutions in some of our most progressive states have little reason to take pride in their attention to the welfare of their employes. One need not go more than a hundred miles from his own community to find institutions where employes are housed in quarters not much better than those pictured. There is happily the beginning of an understanding of the personnel problem on the part of those concerned in the development of public institutions. No more important matter could engage their attention. The efficiency of an institution no matter how splendidly planned, constructed and equipped depends on its personnel. Efficient employes mean better results at relatively lower cost. Institutional boards and institutional architects would do well to study these matters before they build, and in all cases obtain the judgment of institutional administrators who know what the personnel problems are and how to meet them.

Should Be No Allowance For Guesswork

Much has been said in this article which may appear to be adversely critical of architects. Unfortunately for the architects they have left many works which justify such criticism. The architect, with but few exceptions, knows little about institutional administration, nor does he need to know, but he should at least know that he does not know, and seek advice from others on matters of which he is ignorant. The board of trustees which puts all its reliance upon the architect's advice is almost certain to make serious and costly mistakes. We have mentioned some of the mistakes which are the product of such procedure. Similar mistakes can be found in almost every community if one takes the trouble to look for them.

The board of trustees now considering the erection of institutional buildings should ask itself these questions: Do we have available all possible information regarding the extent and character of the service for which we propose to build? Have we anticipated probable increases of service requirement and new demands which may be made upon us in the next five years at least? Have we consulted a thoroughly competent and experienced administrator on all features of the program? Have we an architect who understands the essentials of institutional development and is prepared to consult and cooperate with the best available specialists on institutional management? Have we given due consideration in our program to the convenience, health, welfare and happiness of inmates and employes? Have we planned so that the taxpayer may have a reasonable guarantee that his money will not be spent in non-essentials?

If the board can answer these questions in the affirmative, it is ready to go ahead, but if it cannot, then it would be better for it to spend a little more time in study. Anyone who has had to do with the development of large institutional services knows how easy it is to guess wrong. But in the expenditure of public money, there should not be any allowance for guesswork as to those matters about which accurate information can be had for the asking.

High Mortality Among Russian Sick.—There are probably 6,000 unoccupied beds in the asylums and psychiatric clinics of Russia, says Dr. Starobinsky in an account abstracted in the *Annales Medico-Psychologiques.* This is an extraordinary state of affairs and can be explained only by the mortality among the sick which has increased from about nine per cent before the war to thirty per cent at the present time, as related to the actual population. This mortality is explained entirely by famine conditions. The sick die of tuberculosis, pneumonia, heart disease, scorbutus, typhoid, etc. The caloric intake before the war was supposed to be 2,050; in 1918 this had descended to a paper estimate of 1,090, but the patients do not receive even this ration now. Potatoes are lacking, meat is very insufficient and bread is of inferior quality. There is a constant struggle to see to it that the patients received their food. The distribution in the more disturbed wards often presents a picture akin to that of the feeding of the wild beasts in a managerie. Special care must be taken to see to it that attendants do not appropriate the patients' food. For lack of fuel the wards are always cold in winter time; the temperature being between eight and ten degrees centigrade.

NURSES' HOMES FOR THE SMALLER TUBERCULOSIS SANATORIUMS

By ROBINSON BOSWORTH, M.D., Executive Secretary, State Advisory Commission, and Sund & Dunham, Architects, Minneapolis.

THE problem met in designing nurses' homes for most of the smaller sanatoriums in the state of Minnesota has been not only to provide accommodations for the nurses, but also for the maids and, sometimes, the superintendent of the institution. The ideal thing would undoubtedly be to have separate buildings for nurses, domestics and superintendent, but the cost of this would be somewhat greater, both for construction and upkeep; and for reasons of economy, most of the buildings are planned to house the entire staff of workers, with the exception of male help. Where the maids are housed in the home, they are given one floor entirely to themselves, with the entrance so arranged that they need not come in contact with the nurses' quarters when entering the building. The superintendent's suite of rooms, if located in the building, is placed in one end and planned so that it will have the maximum of privacy. Sometimes, a separate entrance is provided for this apartment.

Some of the buildings have double bedrooms but this has been avoided as much as possible, as single rooms, however small, are considered preferable.

In all the homes the aim has been to avoid anything that might have the least appearance of extravagance. At the same time, an effort has been made to make the construction durable and provide essential comforts and recreation facilities.

Nurses' Home, Southwestern Minnesota Sanatorium, Worthington, Minn.

Most of the institutions are located from two to three miles away from the nearest town, and as a consequence the nurses and other employes are dependent very largely on the life at the sanatorium for their recreation. With this in mind, a large living room, ordinarily with a fireplace, is provided, one for the nurses and one on the floor occupied by the domestics. A small kitchenette, where light lunches and refreshments can be prepared, usually adjoins the living room.

First and second floor plans, Southwestern Minnesota Sanatorium.

The nurses' homes are placed from sixty to 300 feet away from the patients' building. This separates the home sufficiently from the patients' quarters so that the nurses are not disturbed by the coughing of the patients or other noise from the institution. It also makes it possible for the occupants of the home to have entertainments and to make as much noise as they wish at night without disturbing the patients, whose regular hour for retiring is nine o'clock. With this in view, the recreation rooms are usually placed in the center of the building or at the end farthest away from the patients.

Tunnel Desirable in Bad Weather

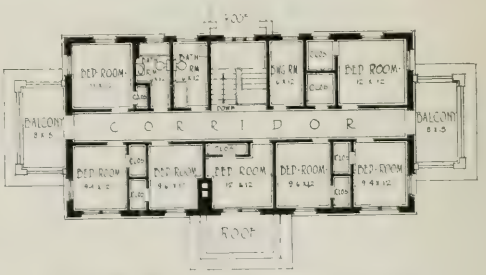
In all the buildings an effort has been made to place the bathrooms, stairways, sewing rooms and linen rooms on the less desirable side and conserve as much as possible of the best view and exposure for the living rooms and bedrooms. All the homes are heated by steam from the central heating plant. Where a tunnel connection is made with the sanatorium building, the pipes are, of course, carried in the tunnel; otherwise they are laid in the ground and thoroughly insulated. It might be said at this time that whenever the appropriation will permit, a tunnel connection with the patients' building should be provided, as it is very desirable to have the pipes run in a place where they can be easily repaired, if any leaks should occur. A tunnel also is desirable in that it serves as a passageway in inclement weather. The nurses are especially anxious to have a tunnel, as it is a great convenience to them in case of an emergency call at night. All they need to do then is to put on a bath robe and run over to the patient's building through the tunnel. This makes it possible for them to get to the patient more quickly and saves them the trouble of bundling up for a walk over to the sanatorium building on a cold night.

For purposes of illustration, two plans, varying somewhat in their arrangement, have been selected. The first is descriptive of the home at the Riverside Sanatorium, Granite Falls, Minn., the other of the one at the Southwestern Minnesota Sanatorium, Worthington, Minn.

Nurses' Home, Riverside Sanatorium, Granite Falls, Minn.

The Riverside home is a three-story building of brick and hollow tile construction. The first floor is given over entirely to maids' quarters. It is connected with the hospital building by a tunnel. The second floor has a suite of rooms for the superintendent, a room with private bath for the head nurse, kitchenette, where light lunches can be prepared, nurses' living room, linen room and two bedrooms for nurses. The third floor contains bedrooms for nurses and a sewing room. The three largest corner rooms on the second and third floors

Second floor plan, Riverside Sanatorium Nurses' Home.



Third floor plan, Riverside Sanatorium Nurses' Home.

First floor plan, Riverside Sanatorium Nurses' Home.

Nurses' Home, Sunnyrest Sanatorium, Crookston, Minn.

is a suite of two rooms and bath for the housekeeper. This bath is also shared by the chief cook, whose room adjoins. All bedrooms are for one person, except the two largest corner rooms. All porches are heated and glazed with casement sash that can be folded to one side. The building is connected with the hospital by a roomy tunnel, starting in the basement at the bottom of

Nurses' Home, Fair Oaks Lodge Sanatorium

are planned for two occupants; all other bedrooms are for one person.

The Worthington home is a two-story and basement building with exterior walls of hollow tile and smooth stucco finish. The first floor is occupied by the nurses and contains the necessary recreation rooms, a suite of rooms for the head nurse, and a guest room in addition to the nurses' sleeping rooms. The second story is for the domestics and is reached by a stairway and entrance separate from that for the nurses' floor. There

Nurses' Home, Lake Julia Sanatorium, Puposky, Minn.

Nurses' Home, Sand Beach Sanatorium

stairway. The stairway is fireproof, as are also the doors connecting it with the corridors on the different floors.

The installation of lavatory with hot and cold running water in each bedroom was considered for both buildings described above, but it was decided that the amount of money available would not permit this desirable feature.

Owing to lack of funds, none of the nurses' homes at the smaller Minnesota county sanatoriums is of fireproof construction, but all, with the exception of two, have exterior walls of brick or loadbearing tile construction.

In general, the nurses' homes are designed to conform in appearance to the main building, although an endeavor has been made to give them a somewhat more domestic appearance.

25 DIE IN FIRE AT MANHATTAN STATE HOSPITAL

Twenty-two patients and three attendants lost their lives on February 19 when fire destroyed part of the Manhattan State Hospital on Ward's Island, New York. Ninety insane patients were on the ward when the fire broke out, and sixty-eight of them were dragged out alive, after many of them had fought their rescuers desperately.

Fire was discovered at an early hour in the morning on Ward 43, a three-story brick building in which were confined the violent male patients. Knowing that many of the patients were of the homicidal, suicidal and pyromaniac types, the guards endeavored to get them out of their beds in the burning building by the ruse of an "early breakfast" call. When the flames appeared, the ruse failed and so bitterly did the patients fight the nurses and guards that twenty-two of them, with three of the guards, were trapped. Chances of escape were cut off when the fire had so advanced that a large water tank in the attic crashed through the ceiling and blocked the corridors.

The source of the fire was traced in dramatic fashion to a tremendous explosion off the island, almost twelve hours previous. Ward's Island is a strip of land in the middle of East River, opposite 116th street, Manhattan, near Hell Gate, where blasting has been going on in an effort to deepen the channel. A heavy charge of dynamite was set off the night before and it is believed to have broken the insulation of electric wiring, thus starting a blaze at the hospital which smouldered until morning.

Fire fighting on the island is said to be of the most primitive sort, and aid from Manhattan was delayed by lack of ferryboats at the early hour. The firemen were compelled to lend their early efforts to a rescue of the patients and could do little toward fighting the fire. The building which burned was a detached structure more than fifty years old.

An airplane view of Dunning, Cook County's psychopathic hospital, near Chicago.

HOSPITAL HEATING AND VENTILATION

By HELEN R. INNIS, Heating and Ventilating Engineer, New York, N. Y.

Although nature bountifully supplies fresh air, it is not by any means free for hospital use, especially in certain climates and latitudes. Miss Innis, a heating and ventilating engineer, brings out in the accompanying article. If clean, frequently renewed air at the correct temperature and humidity is to be furnished patients, in addition to clean food, clean water and sanitary equipment, it will have to be bought on the market the same as any other commodity. At least, the cost of fuel for warming it, the water for washing and humidifying it and the maintenance of machinery for moving it should be intelligently included among the essentials in every modern hospital building.

THE type of apparatus to be used for the heating and ventilation of a hospital is in many cases based upon the first cost of the equipment and its installation. If those who are to be responsible for the maintenance of such equipment are given a fair idea of the difference in the cost of operation of the various types of installation, it may be of help to them in their computations of the actual and unavoidable cost per bed which heating and ventilation will add to their budget. With this better understanding, there will be fewer institutions that will make the original investment in expensive equipment, only to find that they have a heavy liability in the annual cost of the necessary coal and maintenance to enable the production of the desired results.

Medical authorities and sanitarians claim that there should be in all buildings what they term "ventilation." The general public, and in many cases the engineers who are to help in producing the result, do not have an exact idea of just what the requirements of "ventilation" are. There was for some time an apparent division between the advocates of so-called "natural" or window ventilation and "artificial" ventilation, which term is often applied to mechanical ventilation. Recently, however, there seems to have been a commonsense agreement that so long as there is "ventilation" it does not make much difference how it is obtained. The mistake lay in using the terms "natural" and "artificial" for if either is ventilation and the other is not, the mere use of an adjective will not alter the fact.

Essential Factors in Ventilation

There are many factors which enter into the condition of air to be used for ventilation, such as temperature, humidity, dust, bacteria, CO_2 content, air motion and odors, but perhaps the requirements stated by Dr. E. Vernon Hill of Chicago give the most simple statement of what seems to have been accepted as the essentials of ventilation. Dr. Hill divides his recommendations into those for natural or window ventilation and those for mechanical ventilation. In both methods the requirement of "a variation of less than 2° from a wet bulb temperature of 57°" is given as an essential of comfort. For natural ventilation he gives as the requirement a minimum of 800 cu. ft. of space per person, in a room in which the window area is not less than 10 per cent of the floor area and which has windows on at least two opposite sides. The mechanical system requirements would vary with the nature of the building for which the equipment was to be furnished, but Dr. Hill requires that in order to have such an equipment properly considered a ventilation equipment, there shall be more than one distribution register in a room, an air washing apparatus, and that all mechanical equipment should be so constructed as to be readily accessible for cleaning and repair.

Exact information on the subject of the modern diseases which originate, propagate, are communicated or whose attack is rendered worse because of lack of ventilation seems rather scarce. It seems to be generally acknowledged, however, that unless a person is plentifully supplied with fresh air he will suffer from lessened vitality. The solution then would seem to be for the medical profession to make known the condition of air which should be maintained in a room with a given type of occupancy, and that condition be produced, if it is within mechanical or engineering possibility.

Window Has Several Functions

Our ideas of ventilation might be somewhat modified if we considered the chief function of a window. Originally it was an opening in the side wall for the admission of light. Later, portions of these windows were made easily movable so that some air might be obtained through them at times. Other windows in sky-lights or monitors are now often not provided with glass but with louvres so that they are of no use for the admission of light but serve solely for ventilation.

If an engineer wishes to use an open window for ventilation, it would not necessarily be placed

on the outside wall. He might prefer to place it on an inner wall and run a duct from it through the roof or to an inner court so that he might have a source of air supply less contaminated with the dust of the street than the glass or lighting window would be. He might also find it more convenient to put a fan between the source of air supply and the room than to place one in or near the outside window for the purpose of drawing in the air. Should he wish to take further precautions concerning the quality of the air, he could put in screens or filters for removing the dust and dirt, as well as perhaps an air washer for purifying and removing smoke, fumes, bacteria or other impurities and for the regulation of the humidity. There, by a simple process, would be the development of a mechanical equipment for ventilation from a window.

Mechanical Systems Affect Coal Bill

The item in the hospital budget which would be most affected by the change to mechanical ventilation would be the coal bill. And it is the necessity of considering the coal bill which changes the subject of ventilation from one that is purely physiological or mechanical, to a commercial proposition.

There are three distinct methods by which heat and ventilation may be furnished, and the choice made at the time of installation governs to a large extent the cost of operation and maintenance. Much depends upon the human element in the operation both of wards and of mechanical equipment, yet a reasonable approximation of coal consumption with various types of equipment may be made.

The first method is to supply direct heating surface of sufficient amount to offset the heat loss through walls and glass and allow for a normal change of air once per hour by leakage and partially opened windows. The second method is to supply only enough direct radiation to compensate for the heat loss from the rooms, and provide mechanical ventilation to furnish a given quantity of fresh air per bed per hour, at room temperature. The third method is to dispense with all direct radiation in the room and combine the heating and ventilation by supplying a sufficient quantity of warm air to keep the room at the desired temperature and furnish the required ventilation.

For the sake of comparison in dollars and cents, we shall reduce the proposition to the cost of operation of each of the above methods as applied to a hospital ward twenty (20) feet wide and ninety (90) feet long, suitable for eighteen patients, if each patient were allowed 100 sq. ft. of floor space. With a ceiling height of 12 ft. the rooms would contain 21,600 cubic feet. The exposed wall surface will be considered as 765 square feet, with windows in sufficient number to give a total of 315 square feet of glass surface.

With the first method, if one complete change of air per hour is provided for, this would mean an allowance of 1,200 cubic feet of air per bed, per hour. By the accepted method of figuring, there would be 100 square feet of direct radiation required to provide for this air change, with an additional 200 square feet of radiation to offset the heat loss through the wall and glass surface and maintain the temperature of the room at about 68° F. The coal necessary to supply the demand of this 300 square feet of radiation during the average heating season would be about one ton per bed, or an allowance of eighteen tons per season for this one ward.

Under the second method, with mechanical ventilation used to supply a total of 4,800 cubic feet of air per bed, per hour, it would be necessary to practically double the coal requirement and allow two tons per bed.

The third method, with both heating and ventilation taken care of by the delivery of warm air into the room would treble the original coal requirement, demanding about three tons per bed, which would make this means practically prohibitive from the standpoint of fuel economy.

It will be seen from these figures, that in a hospital where conditions are practically as given in the amount of floor space per bed, proportionate wall and glass exposure, and with an allowance of but one change of air per hour by infiltration or partial ventilation, there will have to be added a minimum of one ton per bed per year for heating, with two tons if any mechanical ventilation is provided. Where mechanical ventilation is provided, it would be possible to reduce the expenditure by recirculating part of the air, but the percentage which might safely be recirculated with various purifying systems has not yet been decided. Possibly for hospital work it might be considered entirely out of the question, although it has been successfully done in industrial buildings and schools in various sections of the country.

Ventilating Apparatus Varies

A reference to the apparatus involved by the use of the various methods considered might be of interest. It varies from simple, direct radiation to a very complicated equipment of fans, heaters, washers and ducts which must be taken care of while the building is in the course of construction.

If direct radiation alone is used, all that will have to be considered is the most desirable location of the necessary radiation, the kind of radia-

tion that will be most efficient for the purpose and most easily kept clean, and the method of distribution of the steam piping which will insure an efficient and noiseless system that will provide a sufficient supply of steam to all of the heating units. No humidifying apparatus would be considered, and the variability of temperature which is considered essential would be obtained by frequent opening of windows.

The simplest form of ventilation with direct radiation is by means of an exhaust fan or two to remove a certain quantity of air per minute and insure a certain number of air changes: This would necessitate an increase in direct radiation to compensate for the loss in excess of the one change of air allowed for.

The next best method is the installation of unit ventilators. One or more of these is installed under windows in a room, to furnish any given amount of fresh, warm air for ventilation for that particular room. These unit ventilators are equipped with a motor operating a blower, and connected up in such a manner that the air to be heated is drawn through a window or an opening provided in the wall into the upper compartment of the heater. It is then blown down over the radiator to be heated, passes over a water pan which removes some of the dust particles and then is delivered up toward the ceiling at a fairly high velocity. A vent flue of some kind is provided to remove the exhaust air from the room. In this case, the original amount of direct radiation to provide for heat loss through walls and glass surface is needed, as the unit heaters take care of air for ventilation only.

If a duct system is used, the air is drawn into the building from the outside through screened openings located in the basement walls. It is then passed over tempering coils, drawn through a fan and part of it passed over another heater while the other part is by-passed into a duct below the heater. The temperature of the air delivered to the rooms is controlled by dampers which mix varying quantities of the heated and tempered air at the flue base. In most cases the damper is controlled by a thermostat placed in the room to which the air is to be delivered, but it can be controlled by hand operation.

Must Buy Fresh Air on Market

In the case of both heating and ventilation being furnished by means of warm air delivered to the room, the air from outdoors must be drawn in in sufficient quantity to supply the complete heating as well as the necessary ventilation for each change of air supplied. It is usually drawn in over tempering coils, passed through an air washer and then through re-heaters, as the temperature of air for this purpose is much higher than when air is furnished for ventilation alone.

Fresh air, although bountifully supplied by nature, is not by any means free for hospital use, especially in northern climate and latitude in the winter season. If clean, frequently renewed air at the correct temperature and humidity is to be furnished in addition to clean food, clean water, and sanitary equipment, it will have to be bought in the market the same as any other commodity. At least, the cost of fuel for warming it, the water for washing it and humidifying it, and the maintenance of machinery for moving it into and out of the rooms in which it is needed will have to be known, if heating and ventilating are to be intelligently included in the list of essentials of a modern hospital building.

URGES HOSPITALS TO HELP SAFEGUARD THEIR R. R. SECURITIES

The board of trustees of the American Hospital Association has seen fit to call the attention of hospitals, which have funds invested in railroad securities, to the desirability of asking their representatives in Congress to take action to safeguard these interests.

The text of a resolution adopted by the board follows: "RESOLVED, that in view of the recommendations contained in the annual message of the President to Congress respecting the railroad situation and the possibility of congressional action with regard thereto, the secretary be instructed to call the attention of hospitals which have investments in railroad securities to the desirability of proper action to promote their interests and to suggest to them that they inform their various representatives in Congress and other authorities of their large financial interests in the proper solution of the problem, and to request such congressional action as shall lead to the safeguarding of the funds of hospitals invested in railroad securities."

"The railroad situation is developing a problem series for all hospitals which have endowment funds invested in railroad bonds and other securities," says Dr. A. R. Warner, secretary of the American Hospital Association. "When purchased, these securities were considered a most conservative and safe investment but the present unsettled railroad problems are being reflected in the standing of these securities. This can become a very serious matter for all such hospitals."

USES RADIO IN HOSPITAL CAMPAIGN

One of the first hospitals to employ the radio in a financial campaign was the Lying-In Hospital of Providence, R. I. Before and beginning its intensive campaign for $850,000, the addresses of speakers presenting the hospital needs were broadcasted. As a result a number of contributions were received from various parts of the state, it is said. The present facilities of the Providence Lying-In Hospital are altogether inadequate, it was brought out.

Be not discouraged in performing any task which you know you can do—the gods all assemble to help those who help themselves.

THE LABORATORY QUARTERS AND EQUIPMENT OF A MODERN HOSPITAL

By MAX KAHN, M.A., M.D., Ph.D., Director of Laboratories and Chief of Clinic of Diseases of Metabolism, Beth Israel Hospital, New York.

AT THE present time there is a tendency to standardize hospital departments and hospital equipment, just as sectional bookcases have been standardized. One decides how many sections of bookcases he wants, and as the demand for book space increases, the order for new sections is issued.

Perhaps, so far as book space is concerned, there exists a ratio (although I doubt it) between the hospital size and the number of volumes. But one cannot make the statement that there is a direct proportion between the number of beds in the hospital and the area of laboratory space and the amount of laboratory equipment.

So far as laboratory space and equipment are concerned, there are two distinct types: (1) the strictly utilitarian laboratory equipped to do only routine examinations of all kinds, and (2) the larger laboratory equipped for research as well as for routine examinations.

The Small Town Problem

The modern hospital, whether of fifty or 200 beds, needs a certain amount of laboratory space and equipment. It is wrong to think that a 50-bed hospital needs but one-sixth as much laboratory equipment as a 300-bed hospital; and it is certainly erroneous to speak of the requirements of a 50-bed small town hospital laboratory as being much less elaborate than a similar sized laboratory in a large city. The contrary ought to be the existing condition. For whereas in a city hospital one can in case of emergency call into assistance the laboratory of a larger sister institution, in the small town hospital one must always remain self-contained and self-reliant and all emergencies must be foreseen.

In considering the requirements of a routine laboratory, I shall discuss them under the following headings:

1. The character of the work to be done.
2. The equipment and space.
3. The personnel.
4. The budget.

There has been a tendency to circumscribe the work of the routine laboratory by almost geometrical measures. In venturing to criticize an article on laboratory service I recently made the following remarks* which I venture to repeat:

The patients in a small hospital are just as sick as those in large hospitals. Their ailments are as obscure and as baffling in the country as in the city. Disease knows no aristocracy and is not necessarily urban. It is essential that their condition be studied for the purpose of arriving at a correct diagnosis, no matter where they lie.

It must be once for all understood that hospital economics is best served where the patient's health is most rapidly restored. Surely, arriving at an early, correct diagnosis is essential in the proper treatment of patients, and I think medical men will unanimously agree that the laboratory helps greatly toward this end. To forego laboratory examination because of its expense is not only unethical but (from the community point of view) highly uneconomic.

A hospital of fifty beds or more must support a well equipped laboratory. The patient should be charged, or the hospital should add to its budget three to five dollars per week per patient for the proper running of the laboratory. The average stay of a patient in a hospital is about two weeks and the additional expense of six to ten dollars per patient will not add a great burden to the individual and will bring its return in the therapeutic results that will be obtained. Hospitals make their charges according to cost of maintenance and they must invariably consider as part of their maintenance the cost of the laboratory department.

The smaller laboratory must be equipped with all the necessary apparatus and should have space for bacteriological, serological, pathological and biochemical work. About 1,000 to 1,500 square feet should be provided, preferably divided into smaller rooms of 200 square feet. About $3,000 to $5,000 will buy all the equipment necessary. It is unwise to stint the initial expenditure. One cannot say that two Bunsen burners are enough, as I have seen it stated in so many lists of "necessary" laboratory equipment drawn up by hospital administrators. There should be enough Bunsen burners to have several in reserve.

The personnel should consist of a trained man receiving an adequate salary who is to be assisted by at least one technician and an intern. A porter should, of course, be assigned to the laboratory.

The budget for such a laboratory should be between $5,000 and $10,000 a year, depending on the size of the hospital and the number of examinations made. If each patient is charged from three to five dollars per week for laboratory work, the hospital will have no deficit on the laboratory's account at the end of the year.

Under this heading, we must consider those large laboratories connected with large hos-

*Modern Hospital, 1921, xvii, p. 487.

pitals of national and international reputation, where eminent scientists are engaged in research investigations along bacteriological, chemical, serological and pathological lines The scientific contributions from such institutions command respect and attention. In fact the reputation of these institutions is augmented in direct proportion to the original communications that emanate from these laboratories.

The routine work in such hospitals is under direct supervision of the scientists in charge. In the unusual cases, the biochemist or metabolist or pathologist is called into consultation by the clinician and thus the patient is studied completely.

A Tour of Beth Israel Laboratories

As an example of such a large laboratory, the department of laboratories of the Beth Israel Hospital in New York, now in course of construction, is here described. Its total area is about 15,000 square feet and it is located on the eleventh floor. The personnel, as planned, is as follows: biochemist, bacteriologist and serologist, pathologist, biophysicist, assistant biochemist, assistant bacteriologist and serologist, assistant pathologist, eight technicians, three clerks (in charge of records, library and correspondence), two porters, two washwomen. In addition to the above, one pathological intern and two student interns will be assigned to the laboratory. Space is also provided for at least five research workers.

The visitor will first of all be shown:

1. *The museum* which faces south on the court. It is 32x22 feet and has windows all along the southern wall. This room is to be equipped with six specimen cases (Ta) and with tables along the southern corridor walls for special exhibits. The museum closets will be so fitted with electric lighting as to show the various specimens to the best advantage. The room will also be centrally illuminated. In this chamber only the more interesting specimens will be kept and exhibited. Provisions have been made to keep all other specimens in a large room in the basement. The door to the museum is 5½ feet wide.

2. Across the corridor, which is 7 feet wide, is the *routine room* which faces the north court. It is 36x20 feet in area and has northern light. The door here is 5½ feet wide. In the middle of the room is a table 16x3 feet with a central drain and two sinks, one at either end. Closet space is equipped with gas and electric outlets. Along the entire northern wall is a long table, with electric and gas outlets, with two sinks, 12x12 inches. A hood, 7 feet long, is provided for at the southwestern corner of the room. On the southeastern corner is a space for three electric centrifuges, north of which and still further east, is a large closet for specimen bottles, etc. This room has four large windows and is centrally illuminated. When the room is closed at night, specimens are delivered through a wicket on the corridor wall which opens into a brine closet where they remain until the morning. In this room, are ex-

The plan of the laboratory floor of Beth Israel Hospital, New York

amined the routine urine specimens, blood counts, sputums, smears, feces, etc.

3. A patient sent up for examination or a visitor desiring information is directed to the *waiting room* which faces the western elevators and stairway. This room is 15½x12 feet. It faces Livingston Place and is lighted by two windows. It is equipped, as all waiting rooms are, with comfortable chairs, a table for reading matter and a basin for drinking water. Diagonally opposite the waiting room are the men's and women's toilets. The waiting room is partitioned on its north side by means of a glass wall with a door from the

4. *Record room and library,* so that the clerks in charge of the records will be always supervising the entrances and exits of people into the waiting room. The record room is 21x12 feet and has three doors, to the corridor, the waiting room and the director's office. It has three windows on the western wall. It is centrally illuminated and is equipped with desks for two clerks, reading table, book cases and filing cabinets.

5. The *director's office,* towards the north from the record room, is 12x12 feet and is equipped as the usual office is with desk, book-cases, etc. It communicates with the record room, corridor and the

6. *Director's research laboratory* which is 12x12 feet. It is equipped with work tables and cabinets, sink, hood and centrifuge. The tables have, as usual, gas and electric outlets. This room communicates also with the corridor and the

7. *Chemical laboratory* which is 24x19 feet. It faces the north and west, having three windows on the western and two windows on the northern wall. It is centrally illuminated. Along the two outer walls it has a work table with sinks (12x12 feet) and gas and electric outlets. There are two centre work tables and provisions for cabinets and centrifuges. Besides communicating with the corridor and the research laboratory, it opens on its eastern wall into three rooms, (a) the balance and titration room, (b) the wash room, and (c) the hood room.

(a) *The balance and titration room* faces the court and the street. It is 10x12 feet and is equipped with table for balances and titrating solutions as well as a booth for a delicate balance.

(b) *The wash room* faces the court and is 8x12 feet. It is supplied with sink, drainage table and drying table.

(c) *The hood room* also faces the court and is equipped with hoods and fume closets, so that all work requiring the use of such hoods will be done away from the main laboratory.

8. Opening from the corridor, next to the main chemical laboratory and facing the court, is the *polariscope room.* The window towards the court, can be made completely dark. This room is 6x12 feet, and is provided with sink and table.

9. The *examination room* is 20½x12 feet and faces the court. It is intended here to examine patients, take blood for Wassermann test, gastric analysis, perform lumbar puncture, examine donors, etc. The room has two dressing cubicles, 6x6 feet. There is here an examination table and instrument closet. In the northwest and southeast wings there are lavatory provisions.

10. The northwest wing is devoted to bacteriology, serology and pathology. Facing the court and the street on the northeast wing is the *serological laboratory.* It is 14x12 feet, and is equipped with working tables, hood, sinks and centrifuges. It communicates with the bacteriology laboratory on the east and the office of the bacteriologist on the south.

11. The *bacteriological laboratory* faces the street and the south yard. It is 14x16 feet in area, and is provided with a *transplant room* 3x4 feet, working tables, hood, sinks and centrifuges.

12. The *office of the bacteriologist* is 11x12 feet, and opens on the court. It communicates with the serology laboratory, and by means of an *ante-room* with the corridor. It is equipped with office furniture. One-half of the *incubation room* opens into this office.

13. The *ante-room* is part of the corridor and serves as a waiting-room. It is 8x12 feet and opens into the bacteriology laboratory, the office and the corridor.

14. Communicating with the bacteriology laboratory is the *pathology laboratory.* It has three windows to the yard and also opens into the microtome room and the corridor. It is equipped with the necessary tables, desks, etc.

15. The *microtome room* has two windows to the yard and also communicates with the corridor and preparation room. It is furnished with constant temperature ovens or incubators for paraffin and celloidin work and with provision for freezing microtome.

16. The *preparation room* has one window to the yard. It is 9x12 feet Here preparations are made for autopsy work, and specimens removed are prepared for the museum and microtome work.

17. The *autopsy room* is 21x12 feet. It has three windows to the yard. It communicates with the preparation room and the corridor, the door being in close proximity to the elevators. The autopsy table has a central drain and an

An interesting piece of 1922 construction is the Saginaw General Hospital at Saginaw, Mich., of which Richard E. Schmidt, Garden and Martin are the architects.

over head flushing apparatus. There are sinks for washing the intestines, etc. The morgue is in the basement.

18. The *incubation room* is 6x12 feet. It is divided into two parts, each 6x6 feet, one opening (as has been mentioned before) into the office of the bacteriologist and the other into the corridor. Its wall are well insulated and the room keeps constant temperature.

19. The *sterilizing room* is 18x12 feet and has two windows facing the court. The sterilizers are placed in hoods, so as to avoid the steam, etc. pouring into the room. It communicates with the corridor and the

20. *Wash room* which is 10x12 feet. This room has one window on the court and has large sinks, drainage boards and drying tables as well as storage closets.

21. The *ice room* is 8x12 feet and has brine pipe connection. The room is partitioned by shelves. It opens on the corridor.

22. The southeast wing has, first of all, the animal room which faces the yard and Sixteenth Street. It is 21x32 feet and is soundproof. The floor slopes towards one side where drains are present. Various cages are provided for keeping such animals as rats, mice, guinea-pigs, rabbits, etc. Kennels for dogs are kept in the basement. This room has nine windows and is well lighted and ventilated.

23, 24, 25, 26. On the south side of this corridor are four rooms respectively devoted to (a) *surgical research*, (b) *bacteriological research*, (c) *chemical research*, (d) *special research*. These rooms are 12x12 feet. They face the yard and are adequately equipped. The surgical research room communicates with the animal room and corridor, whereas the other three rooms open only on the corridor.

27. The *fodder room* is 12x12 feet and opens on the corridor and into the animal room. It is provided with bins, etc., for storing the food for the animals.

28. The *general supply room* is 12x12 feet and has shelves for storing glassware, etc.

29, 30, 31. *The radium laboratory* consists of three rooms, (a) the *work room*, (b) *radium emanation room*, and (c) *radium measuring room*. The last room is 20 feet from the others so as not to interfere with the measurements.

The southwest wing is devoted to private rooms for patients suffering from diseases of metabolism such as diabetes, nephritis, gout, etc. One of the rooms here is

32. The *basal metabolism room* equipped with the modern instruments for the determination of basal metabolism of patients. It is 8x12 feet and has a window towards Livingston Place.

WILL STUDY CLEANING

To study methods of cleaning in hospitals, an anonymous friend has given the American Hospital Association the sum of $1,000. A committee soon is to be appointed to investigate this subject, report to be made at the annual convention in Milwaukee.

The West Wisconsin Conference of the Methodist Episcopal Church in October, 1922, opened the Lakeside Methodist Hospital, a sixty bed institution at Rice Lake.

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A VENTILATING CODE OPEN TO DEBATE

THE Industrial Commission of Wisconsin has recently made public the tentative draft of a proposed ventilating and heating code. Some of its provisions are open to serious criticism and should not be allowed to stand in the code when finally adopted.

As tentatively drafted the code is based on the assumption that proper ventilation demands fresh air in given quantity delivered in a given time, and that recirculated air unless it is washed cannot be used except under certain conditions and then only in small quantities.

To gain this end necessitates the installation of a double piped heating and ventilating system with supply and exhaust fans, a system that was installed at great expense in a number of important hospitals, especially twenty or thirty years ago, and later abandoned because of its impracticability and excessive cost of operation. While engineers still hold divergent views on this important subject, the preponderance of evidence gathered by such outstanding authorities as the New York State Commission on Ventilation goes to show that the chemical composition of the air insofar as it affects the occupants of a room is not so important as has been commonly thought, that recirculated air is not necessarily injurious to health and that temperature, moisture and movement are more important and vital to health and comfort. Tests made by these authorities also have demonstrated that where it is possible to have window ventilation the percentage of those affected by diseases of the respiratory organs is greatly reduced. From the standpoint of health, therefore, the system made mandatory by this code is not in keeping with the most up-to-date scientific knowledge on the subject of ventilation.

This code, by eliminating to a large extent the use of direct radiation and substituting the blast system, would probably increase the cost of hospital construction from $300 to $400 per patient bed, and the annual cost of operation about $150 per patient bed, or almost 50c a day. This increased cost would make the construction of many hospitals practically impossible, to the great detriment of the citizens of Wisconsin. The adoption of the code as it stands instead of promoting the construction of new hospitals will compel the use of old and unsatisfactory buildings for many years longer than they would otherwise be used.

In view of the grave doubt that prevails as to the merits of mechanical ventilation and the excessive cost of its installation and operation, would it not be exceedingly unwise for Wisconsin to make the installation of this system obligatory? Should not the state postpone making radical

changes in its building code until it is certain that the code as it now stands, when properly applied, will not produce satisfactory results?

DO UNPAID BILLS CALL FOR LEGISLATION?

AS IS well known, there are laws on the statute books of most states protecting hotels from being defrauded by their patrons, and some hospital superintendents feel that legislation of a similar nature would furnish excellent protection for hospitals.

Groups of hospitals here and there are contemplating, and in some instances acting through their state associations have been instrumental in securing, the introduction of bills in their respective state legislative bodies that make patrons of hospitals criminally liable in the event that they fail to pay their accounts.

But in this respect the situation in hotels and hospitals is not at all parallel. A man may deliberately take up his abode in a hotel without the slightest intention of paying any reasonable and just bill the hotel may render. Few indeed are the people, however, who go to hospitals unless sickness compels them, and while it is conceivable that now and again a patient may enter a hospital with no intention of paying his bill, in the great majority of cases hospital debts are incurred without any intent to defraud. Not infrequently people who have a modest reserve fund go to a hospital for treatment thinking their illness will be cleared up in a week or ten days. Later it is found that in order to obtain satisfactory results they must remain three, four or even five weeks. A stay of this length more than exhausts their reserve funds and they are honestly unable to meet the total hospital charge. Frequently patients are not in a condition to consider financial questions carefully and reasonably at the time of their admission. Furthermore, the amount of the bill to be incurred is often misunderstood, owing to failure on the part of the physician or surgeon who sends the patient to the hospital, to notify him or a member of his family of the probable course of the case and of all the charges that are likely to be incurred, not only for room and board but also for nursing service, laboratory, x-ray and kindred examinations.

Here and there hospitals will undoubtedly encounter flagrant cases of fraud, but is the number of such cases sufficient to justify general legislation on this subject? Moreover, is there not grave danger that any general legislation of this character may be unwisely invoked by the not too discreet and discriminating superintendent, to the detriment not only of his own institution but of hospitals as a whole?

DISPENSARY STANDARDS

THERE is no doubt that at the present time the dispensary is the weakest department in the vast majority of hospitals. Without question, a general adoption of the standards in organization and management of out-patient departments as published in the February issue of THE MODERN HOSPITAL would bring about a tremendous improvement in clinic work.

The difficulty is, of course, that the clinics should conform to the spirit as well as to the letter of these standards. The accomplishment of this will require much education of physicians, hospital administrators and trustees. There is always a danger when general standards of procedure are recommended, such as these, or those of the American College of Surgeons, that an institution will carry out the letter of the recommendations without grasping the fundamental purpose of the plan. At the present time we see hospitals establish laboratories and place them under the charge of an incompetent, self-styled pathologist in order to conform to the standards of the American College of Surgeons. The hospital is then put in the group of approved institutions and sits back on its laurels, satisfied that everything is all right. In other words, organization without idealism of purpose and without men capable of using this organization to the best ends, serves no useful purpose and gives a false sense of accomplishment.

These remarks, of course, do not detract from the excellence of the standards as outlined. They merely point out some of the difficulties of execution. For instance, we agree that it is very fundamental that the professional staffs of the hospital and the out-patient department should constitute one organization and that the director of each service should be continuously in charge both of the wards and of the clinic. Yet, it is going to be very difficult to find chiefs of service who will give the time and devotion necessary to make such an arrangement of real value. With the increasing demands placed on the time of the physicians by the hospital and dispensary work, if it is carried on as it should be, the question of giving them compensation for the time spent becomes increasingly acute.

The whole reorganization of the out-patient clinics will be a very expensive matter. One of the most important recommendations is to relieve the physician as fully as possible of duties not directly concerned with the professional care of the patients. In a large clinic this will mean a

large staff of trained technical assistants. The cost of providing such assistants has, in the experience of many, been one of the chief stumbling blocks in the way of the improvement of clinic work.

The statement that the out-patient clinic should cooperate with charitable societies and other agencies is very timely. There is far too much duplication of work by different charitable organizations, and it is must important that methods be devised to prevent this wasteful overlapping and to facilitate a free interchange of information and a proper division of work between the various charitable agencies.

The most difficult task that the hospital administrator will have in establishing out-patient clinics according to the suggested standards will be, first, the raising of adequate funds; and, secondly, the education of his medical staff to an appreciation of the fact that the out-patient department is coordinate with the ward service and worthy of the same painstaking care and attention.

COST OF VENTILATION

THE cost of ventilation is a subject that every hospital board must consider in seeing to it that every patient is furnished sufficient fresh air to maintain and improve his vitality. No thinking person would deprive a patient of air, an easy and cheap thing to furnish in summer, but not so easy and indeed quite expensive in winter, owing to the fact that considerable coal is required to heat an adequate quantity of air. Miss Innes (see article p. 243) goes somewhat into detail to explain what it costs to overventilate a hospital ward during cold weather. She also touches on the general way in which ventilation is accomplished. The question that comes to the reader's mind is, what does it cost to heat air when ventilation is furnished the entire hospital?

In the average well-equipped hospital the space occupied for patients in wards and private rooms averages approximately 1,200 cu. ft. per patient, but if the corridors, laboratories, kitchens and all other service portions of the building are taken into account, there are approximately 7,000 cu. ft. in the building for each patient. Notwithstanding the fact that 4,800 cubic feet of fresh air is delivered for each patient, as indicated by Miss Innes, (thereby doubling the amount of coal required for heating and ventilating the 1,200 cubic feet occupied by the patient) the total actual extra fuel cost of the entire hospital is increased only 16.6 per cent.

If air is exhausted from the serving rooms, utility rooms, toilets and interior spaces by means of fans installed in the upper portions of the building and the fresh air is allowed to enter through the windows into the wards and private rooms, the actual amount of coal used for heating the entire building will not be increased by more than five per cent. This estimate is based on an allowance of 2,400 cubic feet of fresh air per patient per hour, an amount more than ample for the requirements of patient and nurse.

The construction of vertical ducts without connecting them to fans does not assure ventilation for a building. Only in the winter months when the interior of the building is warmer than the outdoor air will the warm air rise in such ducts. In order to move the proper amount of air, it is necessary to install fans. These can either force air into the building or take it out.

Very few hospitals are located in places where air washers are actually needed. Recirculating a part of the hospital air through an air washer is not good practice. Tests have proved that an air washer may be a germ incubator, and the recirculated air may contain germs more dangerous than a little smoke or dust which a washer removes.

The amount of direct radiation in private rooms and wards should be proportioned to heat properly two complete air changes per hour. If this is done and if mechanical exhaust fans are operated to exhaust the air from rooms where air changes are required, the hospital will have the simplest and least expensive system. Notwithstanding the fact that the fans may not always be in operation, the extra radiator in the patient's room will have a tendency to raise the temperature a little above normal; windows will then be raised and, in order to hold the temperature at a more comfortable degree, fresh air will be supplied by natural means.

The cost of giving each patient adequate fresh warmed air will not overburden the hospital budget, provided ventilation is not carried to extremes, and in the majority of hospitals enough fuel can be saved by proper supervision and firing in the boiler room to more than balance the cost of ventilation.

DR. HALL PASSES AWAY

AS WE go to press, word is received of the death of Dr. Herbert J. Hall, editor of the Department of Occupational Therapy and Rehabilitation and leading figure in that field, which occurred on February 19 after an illness of many months. Until his illness made his active participation impossible, Dr. Hall for a number of years directed the affairs of the American Occupational Therapy Association as president. A review of Dr. Hall's activities and achievements will appear in the April issue.

ROBERT PACKER HOSPITAL "LISTENS IN"

By H. E. BISHOP, Superintendent, Robert Packer Hospital, Sayre, Pa.

THE wonders of radio that have so seized our country at the present time are bringing many comforts and pleasures to hospital patients. The radio is also serving as a source of entertainment, diversion, and instruction to nurses and to doctors as well. It brings to us all the best talent in music that the nation possesses, and gives us instruction from our foremost teachers. It is true that the music, the services, the educational talks, the bedtime stories, or the stock reports do not always "come in" satisfactorily, and that many times the results are disappointing, but surely with the wonderful advances already made in radio a way will be found to prevent or minimize the so-called "fading" and to keep down the noise within reasonable limits. Even at the present time, when conditions are satisfactory, the results are all that could be desired.

At the Robert Packer Hospital we have installed a complete radiophone receiving set in a portable carriage made by our carpenter. The set consists of a short wave regenerative receiver model R C Westinghouse set, R-3 Magnavox radio horn, Model C Magnavox power amplifier, the necessary A and B batteries and Tungar battery charger. A strong cabinet is necessary to carry the weight of the storage battery and other equipment. All of the equipment is mounted in and on a cabinet which has Colson six-inch ball bearing wheels and is as portable as a tea-wagon. Two separate aerials give us three receiving stations in three different parts of the hospital. The aerials terminate on two-spring silver contact jacks mounted flush in the wall. The aerial and ground connection of the set proper terminate in plugs which fit in the jacks. The machine is readily moved from one point to another, and it is only necessary to plug in two cords as you would plug in a telephone connection.

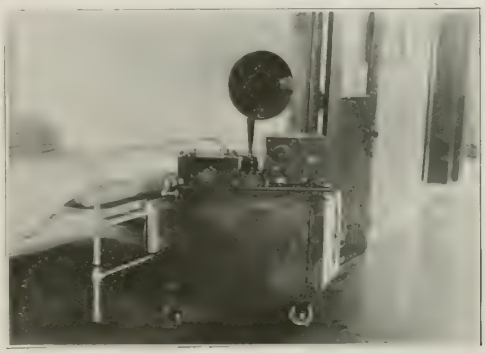
We use the outfit during the afternoon and evening until 9 p. m., part of the time in the men's ward, and part of the time in the women's ward. As lights are put out at nine o'clock, the outfit is then moved to the reception room where it is enjoyed by the nurses.

Our interns and one head orderly operate the outfit.

It is necessary to have the outfit on a portable carriage even though there were but one station as the vibration of the Tungar charger during the day, while the battery is charging, is annoying and objectionable. A combination of switches inside of the cabinet sets up the connection for charging the storage batteries, and the machine is moved to an out-of-the-way place where it may be attached to any convenient electric light socket, and the battery charged without annoyance.

After lights are out on the wards, the nurses get their turn at radio concerts. The interns operate the outfit.

Our nearest broadcasting station is over 200 miles away so we feel that our results have been exceptionally good. Our patients have enjoyed the music, church services, and lectures from Pittsburgh, Newark, New York, Schenectady, Davenport, Birmingham, Louisville, Chicago and several other stations.



The radiophone receiving set has been placed on a portable carriage so that it can be wheeled about from ward to ward. This picture shows the radio in the women's ward; the cabinet door is open to permit closing switches.

INCOME TAXES OF HOSPITAL EMPLOYES

An interpretation of the income tax law relating to the hospital employes when they are quartered in the hospital is asked by Miss Harriet E. Hartry, superintendent of St. Barnabas Hospital, Minneapolis.

In a communication to the editor, Miss Hartry asks if the article published in The Modern Hospital for April, 1922—calling attention to the fact that where employes are subject to immediate service on demand at any time, the value of such quarters and meals at the hospital do not represent additional compensation to the employes—is not contradicted by Mr. Ewing Laporte in his article on the income tax law as applied to hospitals published in February, 1923.

Mr. Laporte replies that some hospitals have assumed that O.D. 915, reported in the April, 1922 issue, is general in effect, covering all cases of subsistence furnished to employes, whereas the contrary is the fact. It applies only to the exceptional case, he declares, and hence he thought it better to omit reference to it in his article, believing that hospitals making returns without advice of counsel would err on the safe side, if they reported the value of subsistence furnished their employes. There are penalties for failure to make all reports due.

There is no conflict between the two statements concerning the ruling, Mr. Laporte brings out, but the latter article is general in scope and did not purport to go into detail.

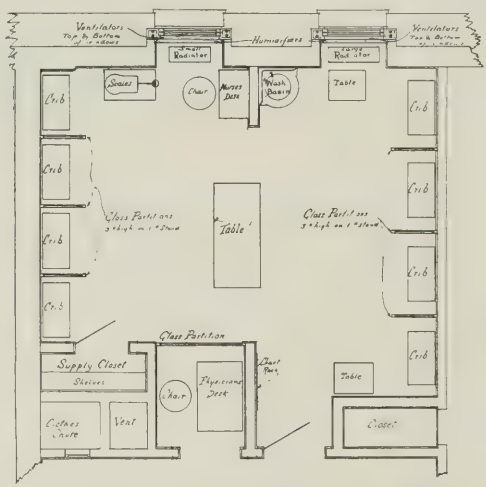
A NURSERY FOR PREMATURE INFANTS

By JOHN R. HOWARD, JR., Superintendent, New York Nursery and Child's Hospital, New York City.

THREE of the principal maternity hospitals in New York have no special nursery for premature babies, for the reason, possibly, that the number of prematures born in the hospital does not warrant it, and that babies from outside the hospital are not received for treatment. It is possible, also, that these hospitals have found that premature babies do well in the general maternity nurseries, given the necessary heat by electric pads, special nourishment, and extraordinary care. Of seven hospitals most likely to care for premature babies, inquiry shows that none of them use incubators. One of them, in a recent article on the care of prematures, was described as using an incubator, but the fact is that the incubator is no longer used.

Four of these seven hospitals have special nurseries. The New York Nursery and Child's Hospital, having a maternity service, indoor and out, which averages 200 births a month, and a children's service as well, operates a premature nursery in the pediatric department, and receives in it infants from the obstetric service and from wherever they may be sent.

This nursery is equipped much like the general nurseries. The temperature is kept at 80 degrees, and for this purpose there are two radiators of unequal size: the small one for mild weather, the large one for cold, and the two together for exceptionally cold. Additional heat according to individual need is furnished by electric pads, for which base plugs are provided. To provide this individual heat for a premature baby in a general nursery has the disadvantage that the infant cannot be removed from his bassinet, for change or bathing, without subjecting him to a temperature that is too low for safety.



Plan of the premature nursery, which occupies the seventh floor of the New York Nursery and Child's Hospital.

The result of such high temperature is to reduce the normal humidity. To offset this, pans of water are kept on each radiator, with mesh wicks spread on perforated shelves. Temperature and relative humidity readings are recorded every four hours.

Ventilation is obtained by common window ventilators at the bottom of the sashes of the two windows, and by a screened ventilator *at the top*. The door to the nursery is always open to give cross ventilation, the room not being a corner room. The infants' heads are protected from drafts by a muslin hood, which completely covers the bassinet over a space about eight inches from the top. As premature infants are peculiarly susceptible to respiratory infections, protection from drafts without killing the gentle movement of the air is imperative. Science has shown that the physical condition of air (temperature, humidity, motion) has a more vital effect upon the body than the chemical condition. Both physical and chemical conditions are more easily controlled in a ward than in an incubator.

It was found recently that the infants appeared to do better when the ward was not full. Accordingly, the number of bassinets has been reduced a third and the acceptances limited accordingly. It seems likely that the number of adults needed to care for the larger number had as much to do with the crowding as the infants did. This is where cubic feet of air space is not always carefully estimated.

The premature ward described has no cubicles, as the accompanying picture shows. The trouble with most cubicles is that they interfere with ventilation. A picture of a newly equipped septic nursery also is shown. Here the glass partitions are large enough to prevent cross infection, and small enough for minimum interference with ventilation, being one foot from floor, three feet high, and but two feet deep. The tables underneath the bassinets are equipped for individual treatment (this hospital does not use the centralized washing slab or dressing table), and can be pulled out at convenience. It is probable that such equipment would be better for a premature nursery, and this nursery is about to be so equipped. At present, when an infant develops an infection of any kind, respiratory, skin, or whatever, he is removed from the premature nursery and isolated. With the cubicle system this will be unnecessary.

After all is said and done, success with premature babies, after prompt removal to a proper temperature, depends upon nourishment and infinitely careful nursing. Breast milk is the one desiratum, and a special nurse devotes her whole time to obtaining this, by expression, from the mothers who have been delivered in the hospital's indoor and outdoor service. Success in this effort is largely responsible for the results obtained.

One nurse is assigned to the care of each four infants. The rules for nursing care are appended.

Routine in Premature Room

Temperature of room, 78 to 80 degrees F, hygrometer reading. Water in humidors in radiators.

Identification: Babies wear anklet with name plainly written in indelible ink. Admission card at head of bed in holder for that purpose.

Weight: Babies are weighed daily when bathed.

Bath: Babies are bathed daily with warm sterile albolene and cotton. Buttocks cleansed with warm albolene and cotton each time diapers are changed.

Eyes: No treatment unless ordered. If discharging, eyes are cleansed with 2 per cent boric solution on sterile cotton.

Mouth: No treatment, unless ordered by doctor.

The newly equipped septic nursery at the New York Nursery and Child's Hospital. The glass partitions are large enough to prevent cross infection but small enough for a minimum interference with ventilation.

A corner of the premature nursery, New York Nursery and Child's Hospital. The room is kept at a temperature of 80 degrees with ample ventilation. Hoods are placed on the bassinets to protect the babies from draft.

Temperature: Babies are taken from bassinet every four hours for temperature and changing.

Feedings: Fed with special small nipple, on nurse's lap if necessary. If baby refuses or cannot nurse from bottle, Breck Feeder or a medicine dropper is used. Fluid charts are kept on all babies. Nursing charts are kept on babies that go to the breast.

Clothing: Babies are kept in warm canton flannel bags with hood, *not cotton*. Winter bag made of double weight canton flannel. Besides being in this bag, baby wears shirt and two diapers. One soft woolen blanket only is allowed on the bed. A hot water bottle, temperature 115°, is kept beneath the pad which lies under the baby. The water is changed every four hours. Extra heat given by electric pad. Electric pads are never placed under covers of baby's bed. Head of bassinet protected by muslin shield.

For Cyanosis, until arrival of doctor, nurses are permitted to give: Artificial respiration. Hold baby head down. Wipe mucus from mouth. Make baby cry by slapping soles of feet. Mustard bath.

Emergency equipment: hypodermic tray, oxygen tank.

JUDGES OF ARCHITECTURAL CONTEST TO MEET THIS MONTH

Names of the winners of THE MODERN HOSPITAL'S $1,000 architectural contest for small hospital plans, together with the prize-winning designs, will be published in the April issue. The five hospital administrators and architects who comprise the jury of award will assemble in Chicago the week of March 5 to go over the drawings.

Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, and hospital consultant, is chairman of the jury. Other judges are Asa S. Bacon of Chicago, president of the American Hospital Association; Clarence H. Johnston of St. Paul, Minnesota, state architect; William Buck Stratton of Stratton and Snyder, Detroit architects; and Miss Adelaide N. Lewis, superintendent of the Kewanee (Ill.) Public Hospital.

As the March building and equipment number goes to press, drawings are still arriving at the Chicago office of THE MODERN HOSPITAL. These plans, of course, are from foreign contestants, rules of the competition requiring that all designs must be in the mail or express office by February 1. This meant that all domestic contributions to the competition arrived in Chicago early in February.

The prizes are $500, $300 and $200 for the three best designs; honorable mention will be given the two ranked next in order. Space has been obtained in a building in the Chicago loop district where, for the conveniences of the judges, the designs will be hung. Each set of plans consists of three sheets; on the first will be the perspective and plat plan; on a second sheet, the floor plans; and on a third sheet, the two elevations and section. The perspective will be in pen and ink without wash or color, and may have accessories such as trees, shrubbery, automobiles and persons.

The jury will base its decision on the merits of the plans from the standpoint of economy in construction and efficient operation, the integrity of the presentation and such other points as it deems best.

All plans will be for a hospital of from 30 to 40 beds. The building will have from sixteen to twenty private or semi-private rooms, women's, men's, children's and maternity wards, and rooms for recovery and segregation. It will be so designed as to permit of expansion.

One of the major ideas behind the contest is to bring out new thought, and the competitors were given freedom to introduce into the plans such elements as they regard desirable which were not included in the slated program.

MAY PUBLISH BOOK ON HOSPITAL LIBRARY

The American Library Association has in hand the manuscript for a book on "The Hospital Library" which will be published, if a real demand for it is evidenced by advance orders. The book has been edited and in large part written by Edith Kathleen Jones, general secretary, division of public libraries, Massachusetts department of education, Boston. She was formerly librarian of the McLean Hospital, Waverly, Mass., and is now chairman of the A. L. A. committee on hospital libraries. She has probably given more thought to the development of practical library service in hospitals than any other person.

The material brought together for this book includes chapters on the scope of hospital library service; hospital library organization and administration; book selection; the medical library; serving the children's wards; stories to read aloud; and a list of over 2,000 books to meet the needs of hospital patients and nurses. There is also a selected list of magazines for the hospital.

The book will be illustrated with photographs of hospital library rooms, equipment and activities. Practical advice is given on what to do and what to avoid in the highly specialized field it covers.

It will be useful not only to hospital and library authorities, but to persons responsible for libraries in other institutions for both adults and children.

It is estimated that the material will make a book of about 224 pages, which will be issued in attractive form, cloth bound, at $2.25.

Readers interested in hospital library work from any standpoint are being asked to place advance orders and thus make possible publication of the book.

RECENT LEGAL DECISIONS AFFECTING HOSPITALS

By DOROTHY KETCHAM, Ann Arbor, Mich.

The following cases although immediately related to the general problem of the hospital, do not involve the hospital as litigant. Thus, the doctrine of charitable uses, the assignment of wills, incorporation, and the release from liability of a cemetery association become important in the establishment of precedent. The interpretation of the last case is dependent upon the statutory construction of the law being judicially considered.

Bequests to Unincorporated Societies

Although the case at hand involves a free library association and not a hospital, the recent decision of the Supreme Court of Pennsylvania has a direct bearing upon the general law of bequests made for religious or charitable purposes. The situation will not be stated, but the controversy arose in the case over the identity of the legatee inasmuch as no single institution exactly answered the description. The court held, among other things, that the fact that the institution was not a corporation is unimportant. "It is now settled in Pennsylvania that a bequest for religious or charitable purposes may be lawfully made to an unincorporated society."—*Re: Shand's Estate, 118 A 623.*

Non-Profit Cemetery Association Not Liable

A religious corporation selling burial privileges in its cemetery and devoting its net proceeds to religious or charitable purposes, according to the New York Court of Appeals, November 2, 1922, was not conducting a business for "pecuniary gain." Hence it follows that in an action against it by an injured employe it would not be deprived of these defenses because it had not come under the compensation law.

The respondent in the case was employed as a laborer in the Cathedral's cemetery. While he was excavating the foundation for a monument he was injured, by negligence of the appellant. The employment was admittedly a hazardous one, and yet the appellant had not protected its employe under the provisions of the Workmen's Compensation Law. The respondent brought action to recover damages, a verdict being found for the respondent after, in trial, the judge held as a matter of law that questions of assumed risk and contributory negligence were immaterial.

The question is raised as to the correctness of the ruling, the court basing its answer upon Sections 3 and 5, defining the term employment to include "employment only in a trade, business or occupation carried on by the employer for pecuniary gain, or in connection therewith." Only in case the workman is engaged in an employment so defined, does the act apply as stated in Section 10. In the opinion of the court the appellant was not engaged in business for pecuniary gain. It owned a cemetery and sold burial privileges for which it received money. "But the one fact that money is received by the employer for property sold or privileges granted is not sufficient to bring him within the definition of carrying on business for pecuniary gain. We may concede that the regular sale of burial rights in a large cemetery to an appellant who agrees to comply with conditions imposed, is a business. That is not enough. The purpose of the business must be profit. Pecuniary gain as used in the statute merely means that the employer must be carrying on a trade, business or occupation for gain."

In the situation at hand there were no salaries, no dividends, no division of profits directly or indirectly. "Substantially all the sums received are used for the maintenance of the cemetery. If incidentally there is any surplus, it is used for the charitable objects of the corporation. To say it is engaged in business for profit is an abuse of language. We attempt to lay down no general principle that will serve the test under varying conditions. We hold that the statute applies to a corporation engaged in a trade, business, or occupation carried on for pecuniary gain, and that the appellant was not so engaged." The decision of the lower courts was reversed and a new trial granted.—*Dillon vs. Trustees of St. Patrick's Cathedral in City of New York, 137 N. E. 31.*

Intent of Will Is Executed

A case recently decided by the Supreme Court of Arkansas involved the construction of a will. A testator disinherited his heirs and devised certain land as a site for an orphans' home to be under the direction of a lodge. He devised the rest of his property to establish and maintain a sanitarium under the control of the same lodge. After the compromise over the will was reached, the income was insufficient to carry on both projects, consequently the chancery court executed the estate according to the doctrine of *cy pres*. "Devises for charitable purposes that are void at law are often sustained in chancery. Where a literal execution of a charitable devise becomes inexpedient or impracticable, the court will execute it as nearly as it can according to the original purpose." It was held that the action of the court was justified. A dissenting opinion points out that apparently "the testator had in mind solely the location of an orphans' home upon the site in question, to be operated and controlled by the fraternity mentioned, as trustee; therefore, there was no general charitable intent to which the specific intent with regard to methods or means could be adjusted. "No American court has ever gone that far," and therefore he does not concur in a decision which gives the lodge "the authority to use this property, or to dispose of it, for any purpose other than that prescribed in the will."—*McCanal vs. Grand Lodge I. O. O. F., 243 S. W. 870.*

DR. WOODS AT CLEVELAND

Dr. C. S. Woods, former superintendent of the Methodist Episcopal Hospital at Indianapolis, recently has been named superintendent of St. Luke's Hospital, Cleveland. Dr. Woods is president of the American Protestant Hospital Association. This organization has announced that its annual meeting will be held in Milwaukee, October 26-28, immediately preceding the sessions of the American Hospital Association.

ILLINOIS ASSOCIATION MEETS

The annual meeting of the Illinois Hospital Association was scheduled to be held in Chicago on March 2, at which time election of officers, discussion of impending legislation affecting hospitals, amalgamation with the Down State Hospital Association and other business of importance was to be acted upon. No general meetings of the association were held during 1922.

VOLUNTEER SERVICE IN A CHILDREN'S HOSPITAL

By BENA M. HENDERSON, R.N., Superintendent, The Children's Memorial Hospital, Chicago.

MOST interesting and, because of its comparative newness, not widely known, is volunteer service by lay women in hospitals, clinics and dispensaries which was largely the outcome of the desire to render some service during the period of the great war. One group of lay women, however, prior to our entry into the war, had fitted themselves in peace times by training and practice to be of great value to The Children's Memorial Hospital, Chicago; this service was of unusual value during the period of war when the services of nurses and physicians had to be eliminated whenever possible.

Early in 1916 the establishment of an infant clinic in the dispensary of The Children's Memorial Hospital demanded quite an increase in the corps of workers. A number of members of the social service committee of the hospital offered themselves for preparation for this particular work. Under the supervision of the nurse who was placed in charge of the clinic and with the cooperation and encouragement of the physician by whom it had been established, this group of workers gradually became proficient in the particular duty each was called upon to perform. A chairman or head worker of this volunteer group was chosen. This worker was one who was quite willing to do her share of the actual work, and who was interested and determined that others should also do their work in the best possible way. She, too, was responsible for the attendance and discipline of the workers when on duty. Rules relating to each separate duty were made and strict adherence to them was required. Absence from the clinic by any member ill or out of town left a vacancy for which there were always anxiously waiting applicants.

Five Volunteer Workers at Each Clinic

The clinics are held three times a week and fifteen workers are necessary in order that five are present at each clinic, each worker being in attendance only once a week.

Upon admission to the clinic, after the infant has been received by the registrar of the dispensary, one of the volunteer workers is prepared to take the history and condition of the child during the preceding twenty-four hours. This gives the mother an opportunity to relate without delay to a sympathetic, unhurried listener a full story of her baby's condition. From the story given by the mother, the worker, by leading questions, is able to obtain almost anything the physician may desire to know about the patient relative to the feeding and stools on the previous day.

By another worker the child is undressed and weight and temperature taken and recorded. In order that all mistakes may be eliminated, a second and more experienced worker checks up on the record of the weight and temperature of the child. The child is now ready for admission to the clinic room and is passed in by a fourth worker who is herself a steering committee. With the patient goes the previous history and the record already made at this visit. The fifth worker, with her desk immediately to the left of the examining physician, is ready for the history card as soon as it has been read by the physician and to her is dictated the physical findings and any additional information the physician may wish to have recorded. This worker makes a copy for the mother of the feeding prescribed and another one for the record for future reference.

The success of our first undertaking in the establishment of volunteer service encouraged us to extend this service to several other departments. At present, the volunteer service of The Children's Memorial Hospital includes several additional workers in the out-patient department who make records of physical findings for the nose and throat department, eye department and orthopedic and general medical clinics. This same service is rendered in the making of supplies, occupational instruction and in classifying and filing of records.

During the years since this work was established the personnel of both physicians and nurses has changed, but many of the original workers continue to carry the responsibility assumed by them more than seven years ago. The success of the work, particularly that in the infant clinic, is almost entirely due to the wise and tactful chairman chosen and to the two physicians under whose charge this work has been developed.

Refrain tonight, and that shall lend a hand of easiness to the next abstinence; the next more easy; for use can almost change the stamp of nature, and either curb the devil, or throw him out with wondrous potency.—Shakespeare.

Scenes at The Children's Memorial Hospital, Chicago, where for seven years volunteer workers have served in various clinics.

SOME PRINCIPLES COMMON TO LARGE AND SMALL HOSPITALS

By DAVID STEWART, M.D., Superintendent, Manitoba Sanatorium, Ninette, Manitoba.

THE hospitals of the province of Manitoba, which join in the Manitoba Hospital Association, on first consideration have little in common with one another. Their unlikenesses are much more evident than their likenesses. There are hospitals of more than 500 beds and hospitals of less than five; modern metropolitan hospitals and shelters of rough boards in the wilderness for the sick; general hospitals caring for the commoner diseases; special hospitals for expectant mothers, for children, for those with infectious diseases, for the mentally diseased, for the tuberculous, for the aged and the convalescent; hospitals built and maintained by the province, by cities, muncipalities, and groups of municipalities, and by church, Red Cross, community and other voluntary organizations.

In each hospital of any size there are diversities of interest, the actual medical and nursing care of the sick, economics, finance, construction, maintenance, education, research.

What purpose can be served by bringing together representatives of so many unlikenesses and diversities? What can be discussed that will equally interest the chairman of a city hospital board and the public health worker in the hinterland; the alienist and the engineer; the country hospital trustee and the professor of medicine; the accountant and the sanatorium worker; the teacher of nurses and the surgeon; the cabinet minister and the more ordinary good citizen?

Care of Sick Is First Problem

Yet on better consideration the common ground among all these hospitals and interests is greater than their dissimilarities and more impressive than their apparent diversities. Let us consider that common ground.

In the first place, all are engaged in the care of the sick and share in the problem of that care.

The hospital as we know it is comparatively modern. The cave men had nothing to correspond to it. To primitive peoples living under hard conditions the ill and the aged were burdens that could scarcely be borne. In the Arctic Circle they were knocked in the head and in Northern India the fashion was to throw them over a cliff. In strictly economic communities—in colonies of bees and ants—inability to work means death without reprieve. A bee with a broken pinion never soars anywhere again but is ruthlessly put to death.

But it is the glory of a civilized community that it is not strictly economic. The sick are cared for, even the hopeless, and some one is at hand to guard over the last faint, futile flicker of their lamp of life. The weak are strengthened, the aged fostered and the hungry fed.

The care of the sick was first a neighborly act, a charity. The good Samaritan finding by the roadside a wounded traveller took him to an inn, arranged for his food and nursing, and paid his bill. The per capita cost must have been low in those days, for two pence seems to have covered everything.

The organized work of good Samaritans, hostels or hospitals for the sick or unfortunate, grew first within the Christian church or in its shelter. Then fraternal and community organizations of many sorts caught the spirit and took up the work. Hospitals were among the first expressions of a kindly feeling of the fortunate for the unfortunate. Almost all were works of charity.

Community Responsibility in Illness

In our day the community has recognized a duty toward sick and unfortunate citizens and many hospitals are expressions not of charity or of voluntary effort, but of community thought and responsibility.

One hospital question of today that is insistent is the question as to how much the community should carry of the burden of illnesses of its citizens. The idea is becoming widely spread that practically the whole burden should rest squarely upon the community, that citizenship should have inherent within it something like a sickness and accident insurance.

Certainly a system by which help in time of need must be accepted with humility as a dole of charity will not have many defenders among us. That it is more blessed to give than to receive is true of the giver and still more true, perhaps, of the receiver. At the same time who would say that the care of the sick is wholly or anything like wholly a community function? Who would place the whole burden of illness and its care on the state?

Illness is not always an accident, but often a fault; not always a dispensation of Providence, but often a proof of improvidence. Illness sometimes is a crime and deserves punishment as much as stealing does. It is perhaps as often a matter of shiftlessness and neglect as poverty is. If we were to care for all who are ill without charge and without question we might as well relieve and indeed subsidize all bankrupts and all poor without question.

The whole burden of illness cannot be lifted indiscriminately from the shoulders of the individual. The whole burden cannot be thrown upon the already heavily burdened community. Our grandfathers had a fashion of saving up for a "rainy day." When illness came they had to see their families and themselves through it. It would seem as though their habit of saving and their sense of responsibility were less general today. We have people coming to us every day who have spent lavishly, and hope to spend again, the butterflies not the bees of the community, who, at the very approach of illness refuse responsibility, put it up to the community and demand the maximum of care as a right of citizenship.

Needless to say the community, if it remains true to its ideals, must stand behind any individual in the emergency of illness, must see that life is not lost, or suffering endured, or infection spread.

Patient Must Bear His Share

But is it not time that the haze of sentimentality should be blown a little aside and matters of illness, accident, disability and defect looked at more closely so that burdens may be adjusted fairly?

The sick man has been considered as beyond all criticism, reproach or even inquiry, immune as long as he is ill, or thinks he is ill, or even says he is ill, from the burdens of community. There is no doubt that many bur-

*Presidential address before the Manitoba Hospital Association, November, 1922.

dens of illness are thrown upon the community which should be borne by the individual, and that the boundary line between inability to work and unwillingness to work is often hard to determine.

The men 100 per cent ill must of course be excused, but it is partly ill men that make the world go around. If all men less than 100 per cent well and 100 per cent fit were to stop work tomorrow the industries of this city would be demoralized.

Dr. Charles White tells of three men chosen for an important bit of work, who when they met compared notes as to health. One, it was found, was keeping under control advanced tuberculosis and cancer; another was badly disfigured by x-ray burns; a third had advanced tuberculosis under control, and disabilities from a railway accident. Yet these three handicapped men came blithely to their day's work and were indeed among the leaders, the most effective workers, in their community.

The time has not yet come and likely will never come when all burdens of illness should be assumed by the community. Yet must the sick be cared for.

All the various and dissimilar hospitals represented in this convention and alike in this: that their work is the care of the sick. In this also are they alike *that the care they give must be the very best.* Nothing but the best is good enough.

No sciences in our day have broadened and deepened like the sciences that relate to disease, its diagnosis and treatment. The last century's advance eclipses all that went before. Today's care of the sick has little in common with that of a century ago except its spirit. Not a day passes without marking progress. Not all that is new is essential or even desirable, but after the chaff is winnowed out the good grain of medical, surgical and hospital progress is without parallel among the sciences. He who would follow even the general trend must give his days and nights to study.

No one man can now be an all-round specialist. And the small hospital of a dozen beds must lack many facilities for diagnosis and treatment, much apparatus that larger and wealthier hospitals possess. Some disease conditions can be investigated and cared for as well in a twelve bed country hospital as in a five hundred bed city hospital, and some emergencies and conditions of illness are met better by the near, small hospital than by the distant large one. At the same time there are disease conditions and emergencies which cannot have anything like the best that modern medicine has to give in investigation and treatment in the small home hospital but must have the fuller facilities of the larger and better equipped distant hospital.

Hospitals Have Different Functions

The essential fundamental principle is that nothing is too good for the sick man perhaps still more the sick woman, and most of all the sick child. Whether in near or far, small or larger, at home or away from home, they must be given the best chance of recovery. There is no hint of inferiority or of falling down when a patient is sent from a smaller to a large hospital. One has one function to perform, the other, another. One is supreme in one sphere, the other supreme in another. The large central hospital could perhaps send as many patients back to their home hospitals for treatment as the home hospitals send to the larger.

The important point is that within the scope of its work there should be, there must be, for hospitals large and small, general and specialized, public or private, one standard only, and that the best. Every organization that functions as a hospital should conform to that one standard. Nothing but the best and foremost application of medical methods and nursing methods should be tolerated in any hospital of any size whatsoever. The difference should not be in quality of work but in range and variety of work. Everything that is needed for the work undertaken should be provided. No patient should lack a shadow of a chance through lack of essential equipment or essential knowledge. Limitations are not only desirable but absolutely necessary, but within the range it sets for itself work should be of an absolute standard.

The smaller local hospitals have a most important function to serve today and perhaps a much more important function tomorrow. They can immensely improve facilities for medical, surgical, obstetrical and nursing work in the small community. Country doctors need local hospitals and can't do their work rightly without them.

President Pritchett in the latest report of the Carnegie Foundation says that a moderate-sized town with its surrounding area should be able to support a community hospital with laboratory, clinics, nurses, and consultation and diagnostic facilities as well as it supports a community high school; and that even the small village can make a modest beginning with a little hospital which will greatly economize the time of the one or two local doctors.

Waste in Over-Elaborate Buildings

While the principle is that the best is none too good, it is necessary to say, and say emphatically, that this applies to essentials. In the past quarter century some hospitals have vied with each other in marble halls and over-elaboration of equipment, each announcing that it had the "last word" in all things. Hospitals are sometimes considered monuments. There is no reason why a hospital should be monumental or over-elaborate, or unduly ornamental any more than a business house or a factory should be. It should be fitted to do its work efficiently and economically as a factory is.

Over-elaboration costs too much in capital expenditure and in upkeep as well. Over-elaboration is one of the elements in increased costs of treatment so that illness has become an impossible luxury for people of moderate means. It is time for a backward swing of the pendulum, time that we asked not how we can possibly spend more, but how we can possibly spend less and still be efficient, still have the essentials. Not until all the many and varied needs of the community can be equally satisfied can over-elaborate, over-expensive hospitals built by either public or private money be justified.

A small community is usually ill advised in loading itself up with a Grecian pillar hospital, the last word in construction, and is often better advised to adapt an existing building for hospital purposes at a tenth of the cost and in a tenth of the time.

Dr. Smith of Northern India, whose skill in the cure of cataract is well known, found that he had to apply a very limited amount of money to the care of a large community. He began with an ordinary standard hospital but found that it could admit and care for in the usual standard way not more than a tenth or a twentieth of the sick. He began to discard non-essentials and finally the small hospital became not much more than a treatment center around which sick people gathered in great numbers with scarcely more than a mattress to lie upon. His results were as good as before and his volume of work much greater.

Just how far we could rightly follow along the same line I am not prepared to say, but economy and a getting down to essentials in hospitals, as elsewhere, are needs

of the times. However good the work a hospital may do it cannot excuse waste.

Over-elaborateness has even been known to hinder rather than help. David refused Saul's most complete armor and brought down the giant with his simple and familiar sling and stone.

Small Hospitals Can Help in Teaching

All hospitals, the large and the small, the general and the special alike, have this also in common, *that they should teach.* They should be centers of instruction for doctors, nurses, and for the general public.

The hospital first became aware of its duty to educate the doctor. A sailor's education is essentially the sea, and a doctor's the hospital. The larger and more central hospitals have so far borne the burden, which is not a grievous burden, of the students of medicine, and they have reaped the advantages, relatively great, which always accrue to teaching hospitals. We learn best by teaching. The time perhaps has come when smaller hospitals could help in the teaching of young medical men. Complaint is being made that the doctor, who is to be a general practitioner, is being trained by specialists rather than by general practitioners, and in large elaborate hospitals rather than under the conditions in which his work must be done. Visits of medical students to the smaller and even the smallest hospitals, if they could be managed, say between terms, would bring the stimulus that the necessity of teaching gives to the hospitals, and give to the students something of what the student of a half century ago had, and that our students lack, in actual apprenticeship served with a busy general practitioner.

When a hospital is spoken of as a school, however, nine times in ten or ninety-nine times in a hundred it means a school for the training of nurses.

Standards for Nurses

It may as well be openly confessed, for it is true, that the extra enthusiasm of hospital boards for the education of nurses, had almost always something to do with the services rendered by the nurses in training to the hospital. At the best there was a definite tendency, as there was with the farmers to whom boys from the old country used to come to learn farming, as there usually is under the apprenticeship system, to make the work the big thing, and the teaching incidental. At best the education was pretty hardly earned; at the worst cruel and unjust exploitation.

The consciences of hospital boards are perhaps more tender than in the days gone by, or better informed, or more under the sway of economic conditions. Anyway more is said out loud nowadays of the education of the nurse and less of her training; more of classrooms and less of learning to do by doing; a little more of what a nurse may get out of it and a little less of what she must give. Hours of work, housing, food, educational facilities, actual teaching, all are better than they were. But the idea of apprenticeship to a trade rather than instruction in a liberal profession dies hard.

Medical interns are of great service to hospitals, but should every hospital that wishes to have the advantage of interns be entitled to set up a medical school on its own pattern, with its own standards, within its own walls to supply them? The teaching of nurses is so important that it should be undertaken only when and where the teaching can be made the matter of importance and the services given incidental. It should not be undertaken and should not be allowed to be undertaken where the labor of the pupil nurse is the matter of importance and the teaching incidental.

No distinction whatever is being drawn between large and small hospitals. Some small hospitals have been very honorable and some large hospitals dishonorable in their relations with their nurses. The call to teach nurses may come to the small hospitals as to the large. There are some things which a small hospital can teach its nurse which a large hospital cannot; and some experience a large hospital can give that a small one cannot. Even in a very small hospital, with facilities, enthusiasm, ability and time for instruction a nurse may spend at any rate a part of her training very profitably.

But the planning, building, the running and the financing of a hospital are matters of administration, while the training of nurses is a matter of education. Groups of good citizens in towns and cities may be well enough informed to be administrators who are not well enough informed to be educators. The two points of view are entirely different; worse than that they are sometimes exactly opposite.

Why should lay boards be considered competent to found schools for nurses, set standards and determine policies? Why should a lawyer, a merchant, a couple of farmers and a real estate agent determine the extent and scope of nursing training in one town; a clergyman, a blacksmith, a banker and a hotel keeper prescribe educational standards for nurses in another town; and a group of business men, very wise, perhaps, in business, lay down the law as to the scope and bent of nursing schools in almost every city.

Medical education is controlled by the university. The education of lawyers is in the hands of the law school which is affiliated with, or a part of, the university. Druggists follow a course and write on examinations prescribed by the university; architects follow a course prescribed by the university and are graduated by the university. Teachers in the higher grades write on university examinations; in the lower grades on examinations set by a central department of education. Jonesville, Brownsville and Johnsonville have their individual public and high schools and their trustees who build and equip and maintain the schools, but the standards adhered to, the studies prescribed, the efficiency of instruction are not prescribed by anybody in Jonesville, Brownsville or Johnsonville but by one central body, under or associated with the university, for the whole province.

Is the work of a nurse a trade to be learned by an apprenticeship or does it belong to the realm of real education? If nursing is a profession why should nursing education alone of all professional education, be outside of university control? The day is coming, indeed should be here already, when nursing standards of education for this province shall be prescribed by the university, and the whole program followed in nursing education be according to standards prescribed by the university. Nursing education should be just as much and just as little a matter for the control of the trustees of a hospital as teaching education is a matter for the control of the trustees of a city or town high school.

To the education of nurses every hospital in the province could usefully contribute. The large and the small, the general and the special, all could add important elements. The ideal training would incorporate several elements rather than one only. Sound and adequate fundamental teaching, training in general nursing with a look in at both a large and a small hospital, and an added experience in at least one kind of special nursing, say of children, of mental diseases, or of tuberculosis, should be better than a narrow course however intensive, confined to one hospital. Affiliation, arrangements between schools

which differ from one another, so that their nurses may broaden their training and add to their experience, has done and is doing much. Affiliation could be more widely applied and should be. But these many mutual arrangements will soon become complicated. They are already complicated by differing standards in different hospitals.

Again we are back to the question of standards. If standards for the nursing profession were set by the university as for the other professions, would not our affiliation, our coordination, our cooperation all be helped? Would not nursing education be bettered? Would not each separate hospital interest be helped? Would any single hospital be injured? And would not order be brought out of chaos?

Besides the education of the student and of the nurse, the hospital, especially the small hospital, has another great work it may do in the education, in matters of disease and health, of the people in general. And the education of the people in general is the beginning, the middle and the end of all campaigns for the prevention of disease.

Yesterday we thought only of cure; today we still are chiefly concerned with cure; tomorrow the great thought will be prevention.

In the *cure* of disease the trained physician and the trained nurse may act almost alone. But in the *prevention* of disease they must have beside them the trained good citizen, the trained teacher, the trained father and mother, the trained children, the trained and educated community. People will *do* right only when they *know* right. And how can they learn without a teacher? And who is to teach if not the doctor and the nurse?

The hospital has always been a center for the teaching of the people, incidentally and unconsciously. Could it not be a center of teaching intentionally and systematically?

The various hospitals which join in this association show indeed at first sight more unlikenesses than likenesses. But we all have these things in common, that our big work is the care of the sick; that whatever we set ourselves to do should have one standard only, and that the best; and that one of our chief functions is that of education.

PROPORTION OF SALARIES AND WAGES TO TOTAL BUDGET

Not many years ago hospital budgets could be divided into three parts, roughly equal: (1) salaries and wages; (2) provisions; (3) other supplies and expenses.

Dr. Herman Smith, superintendent of Michael Reese Hospital, Chicago, recently called the attention of the trustees of the American Hospital Association to the increase in the proportion required for salaries and wages to approximately half the budget of his institution. To check this figure several hospitals were asked to divide their total expenditures for 1922 in this way. The replies follow after the statement of the figures for Michael Reese Hospital.

Michael Reese Hospital, Chicago, Ill., 452 Beds

Salaries and wages	$320,500.00	48%
Provisions	136,000.00	24%
Other supplies and expenses	188,000.00	28%
Total	$644,500.00	

Mount Sinai Hospital, Cleveland, Ohio, 255 Beds

Salaries and wages	$214,744.00	55%
Provisions	76,072.00	19%
Other supplies and expenses	107,312.00	26%
Total	$398,128.00	

Ohio Valley General Hospital, Wheeling, W. Va., 155 Beds

Salaries and wages	$123,939.56	48%
Provisions	59,274.54	23%
Other supplies and expenses	70,495.85	29%
Total	$253,709.95	

Massachusetts Genl. Hospital, Boston, Mass., 446 Beds (General Hospital and Out-Patient Department)

Salaries and wages	$353,455.00	47%
Provisions	135,160.00	18%
Other supplies and expenses	266,934.00	35%
Total	$755,549.00	

Phillips House

Salaries and wages	$141,695.00	51%
Provisions	77,377.00	28%
Other supplies and expenses	59,678.00	21%
Total	$278,750.00	

Note: Special nurses are not included in either group.

Bridgeport Hospital, Bridgeport, Conn., 250 Beds

Salaries and wages	$113,938.00	50%
Provisions	65,483.00	28½%
Other supplies and expenses	49,026.00	21½%
Total	$228,447.00	

Cincinnati General Hospital, Cincinnati, O., 850 Beds

Salaries and wages	$312,993.38	60%
Provisions	105,000.00	19%
Other supplies and expenses	109,104.00	21%
Total	$527,097.38	

Note: "These statistics should be looked upon in the light of the financial stringency in Cincinnati. More money would have been spent for provisions and supplies other than provisions during the past several years had it been available."

Baylor Hospital, Dallas, Texas, 250 Beds

Salaries and wages	47.5%
Provisions	31.6%
Other supplies and expenses	20.9%

Presbyterian Hospital, Chicago, Ill., 431 Beds

Salaries and wages	45%
Provisions	25%
Supplies and other expenses	29%

The above figures indicate that the change in the proportion of salaries and wages to the total budget has been rather uniform in all institutions.

A NEW KIND OF HOSPITAL

Every hospital is not a place for the care and treatment of human sick and injured. A glance at almost any telephone directory will show many varieties of hospitals —shoe, doll, dog and cat, etc. It has been left to one Hy Jacobs of Syracuse, N. Y., however, to open a large pipe hospital. Hy's Pipe Hospital has been in operation for ten years and in addition to a repair department, conducts a service department where smokers may receive expert advice on the selection and care of a pipe.

WHENCE RECRUITS FOR HOSPITAL PHARMACIES?

By EDGAR C. AUSTIN, Pharmacist, Cincinnati General Hospital, Cincinnati, Ohio.

WHERE shall we get recruits for the hospital pharmacies? The demand for the right type of hospital pharmacist exceeds the supply, and this demand will steadily increase, for new hospitals will be built and existing ones will be enlarged.

There are now about 7,000 hospitals in this country, and plans for many new ones and for extensions are on the trestleboards of architects, only awaiting the near-at-hand favorable change in business and building conditions. Our hospitals are receiving the approval and support of all classes and professions, and as time goes by all will regard it as preferable to take an increasingly greater number of cases to the hospitals instead of treating them at home; hence, it is obvious that the number of hospitals will multiply and the facilities of present ones will be increased.

To meet this situation, we must have an increased supply of hospital pharmacists. We must establish some source of supply, for, as any hospital executive will testify, good institutional pharmacists are hard to get and the demand for qualified men is not being met.

In the matter of professional ability, the demand on the hospital pharmacist has increased. He must be much more than a mere filler of prescriptions. Even though the commercial pharmacist may be capable in the drug store, he is not always qualified for the hospital pharmacy, for that field is much broader. Pharmacy exists in the hospitals as one department of a scientific organization which is known as the professional staff. By no stretch of imagination can it be regarded as the independent organization that many think to exist in the retail drug stores.

Special Training Needed

The bacteriologist, physiologist, clinician, pathologist, pharmacologist and others work together, interdependently, and the pharmacist should be qualified to work with them in their dual task of treating the sick and advancing science. In the process of determining what qualifications he should possess, four outstanding facts should be held in mind:

1. The hospital pharmacist works with scientific men who are highly educated and progressive; usually men who are leaders in their respective fields.

2. It is desirable that he cooperate with these men, and in order to do this he must be reasonably familiar with their respective fields of work.

3. His professional co-workers will not accept as a colleague a pharmacist who is not their intellectual equal and who is not as well educated in his specialty as they are in theirs.

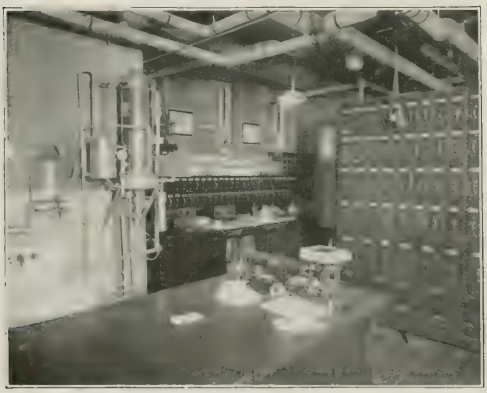
4. Only a man who is accustomed to hard study and who has a mind that has been trained to observe and think will be able to help to solve the problems of curative medicine.

At the present time our hospital pharmacists are drawn chiefly from stores, the mere fact that they are registered being sufficient to get them the position. Very little attention is paid to the special qualifications that are needed in the hospital, because hospital superintendents know from previous experience that it is useless to look for specially qualified men.

If such a man is employed it takes a year, or even eighteen months, to train him to do hospital work, and even then he will not be an expert, except in rare cases. A system such as this produces fairly efficient hospital pharmacists in time, it is true, but this is by no means an ideal state of affairs, for in the meantime the hospital and its patients suffer, and so do the reputations of hospital pharmacists in general.

For reasons difficult, probably impossible to enumerate, there exists in the minds of the medical men a well-defined lack of confidence in the pharmacists, taking them as a class, and this reduces the service which might otherwise be rendered to the physicians. It is safe to say, however, that the common disinclination of pharmacists to give enough of themselves to their profession has played its full part in bringing about this state of affairs.

As the chief point of contact of the science of pharmacy with the science of medicine is in the hospitals, by which is meant the creative point, it would seem that through this channel, professional pharmacy, through the aid of the hospital pharmacists, should take advantage



Section of pharmacy of Cincinnati General Hospital. In the background is shown the prescription desk of Mr. Austin.

Corner of the storeroom of Cincinnati General Hospital. In this department are rows of shelves containing an enormous stock of drugs.

of this field to better its standing, both with the physicians and the public. Surely, through his association with the teachers of medicine, the medical staff, interns and medical students, the expert hospital pharmacist is in a position to enhance greatly the reputation of all pharmacy.

On account of the fact that there is no real source from which hospitals may secure pharmacists specially trained for their work, the drug departments of many institutions have become merely places where prescriptions and other extemporaneous preparations are put up. In many such hospitals the pharmacist is not regarded as a member of the professional staff. The situation is made still more deplorable by the fact that such hospitals finally accept as a matter of course poor service, or at best limited service from the pharmacist, losing all conception of what a really proficient hospital pharmacist should know and do. It is hardly necessary to point out that both the hospital and the profession of pharmacy lose much when this condition prevails.

View of the stock shelves in Cincinnati General Hospital. There are several other sections similar to this.

In spite of a hospital superintendent's desire to secure a capable pharmacist, he may err in his choice. There are no standards for him to go by, and he has no way of telling what qualifications a man should have for this line of work. Because of the lack of qualified men and accepted standards it would seem to be the duty of the profession for its own future welfare as well as that of the hospitals to make provision for the training of hospital pharmacists. And when these men have been specially trained, the hospitals should recruit their pharmacists from these ranks.

Course of Training

Only after careful and judicious inquiry should specific educational requirement for hospital pharmacists be made. In a tentative way, however, it may be said that they should at the minimum be required to complete a four-year college course that leads to the degree of bachelor of science in pharmacy.

In the interest of hospital pharmacy, the course should be so arranged as to include careful instruction in those cultural subjects which produce breadth of view and refinement. It should include those which are basic or fundamental to the science of medicine and that of pharmacy, as well as those that are of pharmaco-medical character, such as biochemistry, bacteriology, serology and immunology, alimentation and physiology, pharmacology and practical therapeutics.

It is desirable that the students acquire part of their practical experience in the pharmacy of some large teaching hospital. The course would be a combined academic and professional one, and probably it could be completed in five college years of eight months each. If practical work were done in the hospital during the summer months, the course might be reduced to four calendar years. However, it seems that it would be advisable to limit the credit for this practical experience to the amount that would be justified in each case.

Some may deem this an excessive amount of training. The attention of such persons is directed to the fact that the educational requirements outlined are not more than equal to two-thirds of the educational requirements of the men with whom the hospital pharmacist must work and cooperate. As a matter of fact, these requirements are but little more than equal to those of university schools.

The writer does not wish to be understood as finding fault with men who have gone through recognized colleges of pharmacy. They have been taught all that is necessary in commercial and manufacturing lines, and that was the object of the school. Necessarily, however, they will have but vague ideas of a number of subjects in which a hospital pharmacist must be proficient.

When the ordinary pharmacist commences his duties in a hospital pharmacy, he finds new people and new work. Even his status is changed. Previously, he has practiced pharmacy as somewhat an independent, isolated profession, but in the hospital he finds that it is only one of a number of closely associated professions. Pharmacy, the new man finds, is one of several branches of a scientific organization, the object of which is to combat disease. The pharmacist is a specialist in this organization, and he must work with other specialists, the pathologist, the pharmacologist, the therapeutist and others. Each of these is more skilled than the others in his own specialty, but all, including the pharmacist, are working to one definite end, each contributing his share.

The present system of training recruits for hospital pharmacies has had a long, thorough trial, and it has proved to be unsatisfactory. It does not furnish pharmacists who meet the expectations of the staff. It is altogether too slow, and with the long time it takes the instruction is inadequate and uncertain.

Under the present system the hospital pharmacist is slowly but surely dropping behind the men in the other hospital professions. It may be that he is advancing some, but as the others are advancing more rapidly than he, the space is widening. This, if nothing else, shows that there is needed both a system of training and a place where this training may be had.

PACKING SPECIFICATIONS FOR CANNED GOODS

At the 1923 annual meeting of the American Hospital Association in Milwaukee in late October, a demonstration of the use of packing specifications for canned goods will be given, it is announced. A special committee has been authorized by the board of trustees of the American Hospital Association to work out a practical demonstration of the specifications. Packing specifications are definite and only clear fraud can prevent the hospital from getting the exact grades ordered when these specifications are used. By making use of these specifications instead of brands, the hospital buyer can compare prices.

Guy J. Clark, purchasing agent of the Cleveland Hospital Council, and Henry J. Southmayd, assistant director of Mount Sinai Hospital, Cleveland, compose the committee.

Every brave warrior may experience moments of threatened disaster; the world's greatest speakers have their talents desert them on the platform, likewise the most able worker may get out of harmony with himself at times and fall below his standard of efficiency, but the fact that you recognize the condition when you meet it face to face and the very fact that you have slipped from a higher plane of efficiency is the best evidence that you can overcome all obstacles that lie in your path.

SOCIAL SERVICE PROBLEMS IN THE HOSPITAL*

By ALICE H. WALKER, Director, Social Service Department, Harper Hospital, Detroit.

THE problems of the social worker are determined largely by the nature of the institution in which she works. Obviously the problems of the worker in a state hospital for mental cases will differ from those of the worker in an orthopedic or a maternity hospital. But sooner or later the worker in a general hospital will be called upon to deal with all the types of problems found in the special hospitals, plus many more.

Whatever the type of institution may be the social worker must adapt her work to the particular needs presented. This will require careful study of the field and a broad understanding of the community relationships of the institution.

Hospital social service is based primarily on the medical needs of the patient and the well-trained social worker, however diverse the demands on her may be, will face steadily that goal of service to the physician in helping to restore the patient as rapidly as possible to his place in the community.

Must Choose Her Material

One of the problems which every social worker faces is the question of how to handle the volume of work that confronts her, how to limit the intake in order that she may not be so pressed for time that she cannot do real constructive work for her patients. Since there are never enough workers to serve all the patients, the choice of cases must, of necessity, be determined by the character of the social needs presented. She must decide where the most effective reconstructive work may be done.

Two strategic points of contact are made with the community on the admission and discharge of patients. Both should pass through the hands of the social worker. If there is an out-patient department, this matter is greatly simplified, for the social workers of that department will have already made the first contact with many patients and are ready to carry on the social service when they are discharged from the hospital.

The social worker, as well as the physicians and nurses, have the opportunity to show a kindly, sympathetic, human interest when the patient is admitted which goes far toward winning his confidence and making him feel that he is a guest of the hospital. If he has difficulties or worries that hamper his recovery she may be able to assist in removing them.

It is particularly important that the ward worker should be notified of the pending discharge of a patient in ample time to perfect her plan of treatment. Frequently, she is given such short notice that it is impossible to make a satisfactory plan. The patient will have been in the hospital for weeks probably, when suddenly there is a call for more beds and all patients who can be discharged must go. The physician casually notifies the social worker that "Mrs. Jones is ready to go out this afternoon but she tells me that she has no place to go. Will you look after her?" Obviously, this is not fair to the patient, nor to the social worker. It does not allow for any well considered scheme for permanent placement.

Adjustment of Patients to Community

In medical science the real test of the benefit which a patient may have derived from hospitalization is proved by the end results. Scientific knowledge and rare skill may have been employed in making an accurate diagnosis but that of itself will be of little value unless followed by equally skillful treatment. So it is in social work. The social expert brings her specialized knowledge to bear upon the personal problems of a patient. She alleviates his immediate anxiety by attending to his outstanding social needs. But the real test of her skill is shown by the plan which she is able to carry through for the adjustment of the patient to the community. In this she must collaborate with the physician in order that the medical plan may correlate with the circumstances of the patient's life.

It is easy enough in theory to work out a fine scheme for the patient's welfare but it is another thing to put it in practice. However, the cooperation of the patient may be obtained, ordinarily, by taking him into confidence. The doctor or social worker should explain to him the nature of his malady, the probable duration of the illness, and the general plan of treatment. He should be convinced of the important part which he must play in supplementing the efforts of the physician, if he desires to get well. His mode of living must be such that it will allow for the success of the plan of treatment. Analyzing with the patient, point by point, all the factors of his case will bring into clear perspective the difficulties as well as the advantages and will go far toward helping the patient to a solution of his own problems.

The hospital social service department is not a relief-giving agency, therefore, if the family budget will not provide the special diet for the invalid or if it is insufficient to carry the family until the father is strong enough to return to his job, assistance must be sought from some outside source. It is often very difficult to convince a relief-giving agency that while $6 or $8 weekly will keep a family living, it is not adequate to provide for proper convalescence. Among the most trying situations the social worker will meet is the difficulty encountered in persuading the lay workers of some outside agencies to consider a patient or a family from the medical viewpoint.

Great Field in Mental Cases

Possibly in no field is social service more necessary than in dealing with mental cases. In the average general hospital the patient suffering from a latent mental disorder does not receive treatment commensurate with his needs. The physician who has not had special training in neurology or psychiatry is slow, as a rule, to perceive obscure psychopathic symptoms, or recognizing them, he feels incompetent to treat them. As a result, many patients who are verging on mental disorder go out into the community without any help being given. The day is not far distant when the hospital that permits this neglect will be considered guilty of criminal negligence in failing to recognize its obligations and responsibilities, not alone to the patients and their relatives but to community organizations and to the general public.

This group of patients forms a grave problem for the social worker particularly when the mental disorder whether potential or apparent is closely associated with some form of social misconduct.

The problem of supplying a housekeeper in the home where there are young children and the mother is a temporary or a permanent invalid is very difficult to solve.

*Excerpt of a paper read before the sixth meeting of the Michigan Hospital Association at Detroit, December 6-7, 1922.

This is particularly true in the home of the inoperable carcinoma, the incurable heart or other chronic case and until some hospital provision other than the county infirmary can be offered for chronic patients who have always lived independently and respectably in their own homes, the solution of the difficulty will not be easy.

Rehabilitating the Patient

It is always a question how far the hospital social worker should carry her casework when the problem is no longer medical. Where there is a well organized family relief agency in the community her work is greatly simplified.

When planning to fit the patient back into his niche in society, the exact degree of handicap, whether physical, mental or moral, must be reckoned with. All unnecessary strains must be eliminated and when necessary, the reeducation of the patient must be undertaken in order that he may make a satisfactory readjustment; otherwise much of the good work accomplished in the hospital will be futile and the patient will not be able to function at the highest plane of his economic efficiency.

There are undoubtedly many hundred people in the county poor houses today who could have been saved from the human scrap heap and who would now be earning their own livelihood if some person had but extended a helping hand at the strategic moment to assist them to readjust themselves to changed circumstances. In many instances it would have meant retraining and temporary assistance with good moral bolstering and a prodding of pride and ambition.

Fortunately we are awakening to the great economic waste to say nothing of the injustice of which we have been guilty when we have ruthlessly pushed aside men and women, many of them below the prime of life and have condemned them to years of inactivity or perhaps beggary. Every person who is industrially restored and readjusted or even partially restored proves an asset to the community instead of a liability when he becomes a contributor to the commonwealth of society.

The problems of all social workers in Michigan have been lessened many fold since the state vocational rehabilitation division was organized. The combined wisdom of the physician, the psychologist, the expert vocational adviser and the social worker usually succeeds in fitting the handicapped person into the new place in society that he is best adapted to fill. Not infrequently he is much better adjusted than he was before his accident.

Vital Point of Contact in Dispensary

At the twenty-third annual meeting of the American Hospital Association held in West Baden two years ago, Dr. Louis Baldwin stated in his presidential address that the time had come when the value of the hospital was to be measured in terms of social service. There is no more effective channel through which this service may be rendered than by means of a well organized out-patient department. It is through this medium that the hospital makes its most vital contact with the community. It reaches a greater number of people than ever enter the hospital proper. Only about 20 per cent of the dispensary patients enter the hospital, the remaining 80 per cent receiving their treatment in the clinics.

By the very nature of its work the out-patient department becomes an important community health center and through its social service department it plays a considerable part in all community programs for the rehabilitation of individuals and families. Its place in the field of preventive medicine and public health education is very significant.

The social workers in the dispensary occupy perhaps the most strategic position in the whole social service department. The dispensary has been styled the front door of the hospital. For a large number of patients it proves the door of exit as well.

For the majority of patients the clinic visit is their first contact with a hospital and the kindly attitude and interest of the social workers help to dispel much of the timidity and apprehension of the applicants and to assure the patient that his individual needs will receive special attention.

The problems found in the out-patient department differ somewhat from those of the hospital but the social work of both hospital and dispensary should be correlated under one head even as the medical work of both departments should be correlated.

One of the outstanding problems in the dispensary service is the migratory habits of the average dispensary patient. He is rather an uncertain person to reckon with, being liable to shift his place of treatment. No perfunctory system of follow-up by postal card will overcome this failing. In a large city the difficulty is increased by the great number of transients. It is discouraging to look over the monthly attendance and find that 500 or 600 patients made only one visit during the month.

This irregularity of attendance is largely reduced in the clinic where a social worker is stationed. When the patient is taken into partnership and made to understand what an important part he must play in his own treatment, he is much more liable to give intelligent cooperation. The friendly, individual interest shown by doctors, nurses and social workers is invaluable.

In the dispensary even more than in the hospital many administrative and clerical functions are likely to be required of the social service department and it is quite easy to understand why this should be. Much of the public health education, the organization of special health classes, food clinics, work in physiotherapy are usually introduced into the dispensary through the initiative of some physician seconded by the efforts of the social service department. Their organization and supervision devolves upon the workers of the department. The social service dietitian conducts classes for diabetics, for nephritics, for undernourished children and others needing special instruction and direction.

Sometimes, indeed, it depends upon the social service department to find means to finance these projects. But in the out-patient department as in the hospital while the combination of administrative and social duties is reasonable, it is necessary for the social worker to see that she has assistants enough so that the purpose for which her department was created will not be neglected.

Factors in Future Development

The future development and standardization of hospital social service depends largely upon four main factors:

1. Greater unanimity of opinion regarding the real purpose of the work.
2. Better qualified and better trained workers, thoroughly grounded in the principles and practices of social case work and with vision of the possibilities of the constructive value of their work.
3. Broader education of the medical student in the social service aspects of medicine.
4. The hearty support of the social agencies of the community in carrying out the program for the physical and social rehabilitation of patients.

DEVELOPING SATISFACTORY INTERN SERVICE*

By C. W. MUNGER, M.D., Superintendent, Blodgett Memorial Hospital, Grand Rapids, Mich.

SOME of the questions which logically apply to the subject of developing satisfactory intern service are: Why does the intern exist? For whose advantage does he exist? Could we get along without him?

It is common for hospitals to feel that the gain is all on the side of the intern, and, on the other hand, many of our interns are likely to believe that they give much more than they receive.

The intern and the problem of training him exists first of all because he, himself, is an unfinished product. To be sure he has had a grammar school education; has been graduated from high school; has spent from two to four years in a college or university; or may possibly have acquired a master's degree or Ph.D. Following these preliminaries he takes the four-year medical course. Had any man been able to obtain such a training 100 years ago, or even fifty years ago, he would no doubt have stood out as one in many thousand, but as we all know, the modern development of medicine has necessitated this longer period of scholastic effort. The men who come to our hospitals as interns have had the *classwork* in their subject but require laboratory experience. The properly organized hospital provides these laboratory facilities better than any other agency.

Course Must Be Truly Educational

Hospitals attempting to render efficient medical service without resident doctors are greatly handicapped. In the proper type of hospital the intern can fill this need for the resident doctor and at the same time be effectively trained. We must keep constantly in mind, however, the fact that the intern is in the hospital primarily for training, and only incidentally for the service of the institution. Our nurses' training schools are slowly but steadily abandoning the ancient idea that the pupil nurse is in the institution to do the hospital's work, and incidentally to get what training she may pick up. The same principle applies to the intern. The course must be placed upon a truly educational basis if it is to be worthwhile.

What should an intern do for the hospital in which he accepts an appointment? First of all, in his relation to the patients he should act as joint medical agent of the hospital and of the visiting physician. He should write histories on all patients whether free, part pay or private. He should do physical examinations on all patients with the possible exception of pelvic examinations in certain instances. He should assist in the operating room whenever any patient on his service undergoes a surgical procedure. He should be present at, and assist if necessary, at the autopsies performed in the institution. In addition to recording the history and physical examination, the intern should methodically and accurately keep up the clinical record of the patients throughout the stay in the hospital. He should see every patient two or three times daily and should cooperate with the visiting physicians in the ordering of medicines and other treatments. Many times the routine medication will be left entirely to him. He should be available both day and night to look after emergency calls, and to see that his patients receive every necessary medical attention. He should assist in the out-patient department clinic which pertains to his service. He should act, without undue presumption, as a sentinel for the medical management of the hospital in the detection of poor or inefficient service of any type which its patients may receive.

Hospital Should Supply Variety of Cases

What, on the other hand, should the hospital do for the intern? First of all, the hospital should supply a sufficient number and variety of cases to give its interns well-rounded training. This matter is not difficult for any hospital of fifty beds or more. If the hospital is deficient in one particular type of case, it is many times worthwhile deliberately to attempt to attract more cases of that nature, as it not only gives the intern better experience but rounds out the service of the hospital to the community and provides better experience to the nurses in the training school.

A hospital may have a wonderful variety of medical and surgical work, and may have well-prepared interns to assist with these patients, and still fall short of giving those interns a satisfactory training. The missing link in such a case is the visiting physician who appreciates the services of an intern, and who is willing to give him bedside instruction. In our smaller communities although they may have had hospitals for many years, the physicians have accustomed themselves to render service without the assistance of house doctors and do not realize of what value these young men may be to them. In one locality several visiting physicians have employed nurses for years to assist them in handling their hospital work, including assistance in operations. Had the hospitals in that locality always given efficient intern service, these physicians might have been spared many thousands of dollars expense.

Don't Make Intern an Orderly

The dignity of the intern's position in the institution must be maintained by the management. The fact should be borne in mind by everyone that the intern is a medical graduate, and while his authority is no way equal to that of the attending physicians or the higher medical officers of the hospital, he is, nevertheless, deserving of consideration. Some hospitals, particularly small ones, have erred in attempting to make orderlies out of their interns. The morale of any intern service can be destroyed by such a practice. It is important that a very definite line be drawn between the duties of the medical officer and the orderly. Hospital nurses should receive every consideration from the intern but it is likewise just as important that members of the nursing department or other long term employes be not permitted to ignore the rights of the intern.

The hospital must, of course, supply competent department heads, particularly in the laboratory, the x-ray, medical record and the dietary departments. Well trained workers in these positions are absolutely essential for good service to patients and, incidentally, they are able to give valuable instruction to the intern.

Large numbers of charity patients often give added value to an intern service. In the writer's opinion, however, charity patients are not at all essential in training interns, provided the attending staff of the institution in question is willing to devote extra time to the instruction of the men on their service. In case the hospital *is* able to provide unusual experience for interns in charity cases, it should make certain that all such work is supervised. It is, of course, doing a poor patient an injustice to permit

*Paper read before the Michigan Hospital Association meeting, Detroit, December 6-7, 1922.

any major procedures to be performed by interns alone. Moreover, this manner of handling charity patients is decidedly derogatory to the best interests of the intern. If he works alone he is more than likely to teach himself to do things incorrectly. It is likely that any intern is better off to act as first assistant in twenty-five operations done by a competent surgeon who will take time to instruct him than to do fifty operations of the same type without previous experience and without supervision. Interns should be given special opportunities in the out-patient department. The clinics there represent very closely the relation of physician and patient. In the clinic the intern will also learn to deal with patients who must receive treatment in their homes, where the ideal conditions of the hospital are not found.

Should Encourage Emergency Work

The hospital should encourage all possible emergency work. Such service is of great value to the community and the hospital makes a substantial contribution to the community when it trains medical men to act quickly and accurately in emergency.

It goes without saying that comfortable quarters make any internship more attractive. It is surprising that many hospitals provide much poorer accommodations for their interns than for their pupil nurses. Some institutions may be limited architecturally as to living quarters but it should be possible for all to provide plenty of good nourishing food. An institution indeed takes a cruel advantage if it provides cheap or unpalatable food for any of its staff. In connection with, or near, the interns' quarters, there should be a complete medical library with particular emphasis on current journals covering the various branches of medicine.

As chief of the interns the hospital should provide a resident physician. In larger institutions it may be possible to divide this authority between two or more residents, each to handle a separate department. Hospitals often make the mistake of employing as resident physician any young doctor who is available, provided he has successfully served an internship. The proper supervision of interns in a hospital cannot be performed by every physician, no matter how well trained. It is important to select a man who will be liked and respected by the men serving under him. He must necessarily be broad-minded, and if he has had experience as a teacher in school or college, he is still better prepared.

The hospital should take care not to select a resident who will assign to himself all the valuable cases and who is more interested in obtaining experience for himself than in training interns. The hospital does not owe the same duty to a paid resident physician that it does to an intern. The resident physician is in a measure, a trained individual, and is not in the hospital for what he, himself, can learn but for the benefit of hospital and intern. Residency in a good hospital is an excellent introduction to practice in that locality, however.

The resident or, in a small hospital, the member of the staff who assumes this duty should arrange a series of ward walks once or twice each week, at which different members of the attending staff take up particular diseases with the interns, exhibit such cases as may be in the institution and discuss the condition from all angles. Certain phases of laboratory work, of x-ray work, and of medical administration can be taken up in this manner with the interns by the director of the laboratory, the roentgenologist, and the medical superintendent respectively. A well-trained dietitian can help greatly in discussions of nutrition and diet.

Another adjunct which seems to work well is a journal club composed of the members of the house staff and of any other medical employes of the hospital who wish to participate. An hour or more is devoted to this purpose each week. The group listens to abstracts of interesting material from current journals which have been prepared by the house officers. The men are thus enabled to keep closely in touch with current medical literature.

Autopsies Important in Training

In the instruction of interns, as well as physicians in general, it is important to maintain a high percentage of autopsies. We have had one or two excellent articles in hospital journals in past months on this subject. My experience confirms the point of view of these writers, who state that the percentage of autopsies may be doubled or trebled at will if sufficient interest is taken in the matter by the superintendent and house doctors. It does not require more than a discussion of the matter with the intern to arouse his interest, and if the resident physician is interested and will supply himself with suitable arguments in favor of postmortems, the family usually can be won over. The custom of granting some special recognition to the intern who, during his service, obtains the largest percentage of autopsies, usually bears fruit. Special attention given to this matter in the writer's own hospital in the past four months has been productive. For the first seven months of 1922 the autopsy percentage was 25.7. For the period between August 1 and December 1, the percentage was 53 per cent, more than double the number.

The interns should be permitted, and expected, to attend the clinical meetings of the hospital staff. It is also well to let the intern present the histories of cases on his service when they are reported in staff meetings. In case a man has devoted an unusual amount of time and interest to a particular case, it seems perfectly proper that he should be permitted to present such case to the staff. This type of experience serves as a part of his training, and will be of value to him later on when he wishes to participate in discussions at medical societies or other meetings.

Another point often disputed concerns the privileges which the hospital should grant the intern with regard to association with the nurses in training. We should consider every intern a gentleman as well as a scholar, until he has definitely proved himself otherwise. The writer is opposed to the custom which exists in many institutions of maintaining blue laws regarding social relations between interns and nurses in training. If an intern cannot be trusted to conduct himself as a gentleman in relation to nurses, is he then the proper person to put into intimate relation with our patients? Experience has taught that ironclad regulations on this subject have sometimes caused more difficulty than they have prevented.

Interns Should Not Be Paid

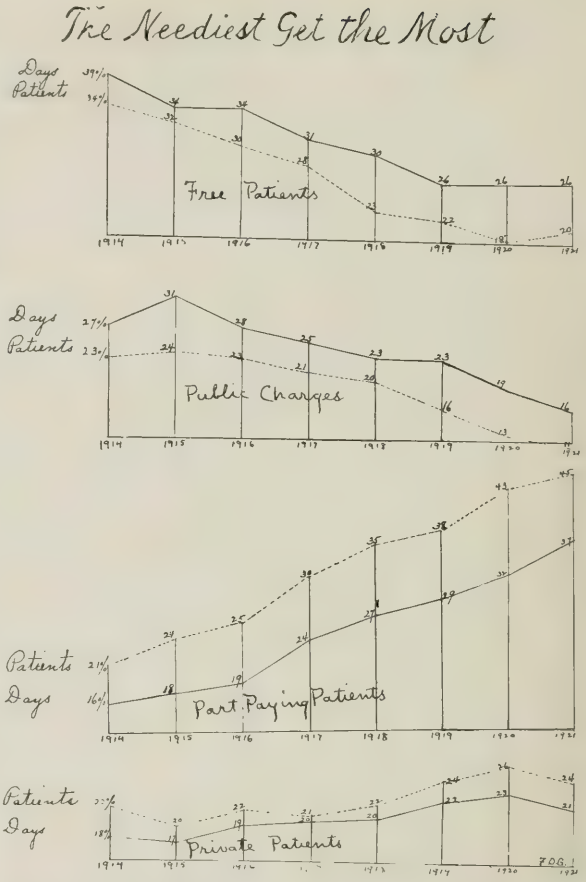
There have been few hospital meetings at which in one form or another the following question has not been asked: Should interns be paid a salary in addition to the board, room and laundry which they ordinarily receive in an institution? The writer's answer to this question is decidedly, No! Interns are students. If their instruction does not compensate them for their service, then that instruction is not good enough. Improve the instruction which your hospital gives, and you will get good interns. Try to make up for this deficiency by paying a salary and difficulty will arise. Resident physicians should, of course, be paid, but they must have had an internship previously

and are, therefore, definitely valuable. Hospitals which cannot offer good enough training to attract interns without monetary compensation should not be permitted to train them. An intern's loan fund will take care of the man who needs financial help. Interns should not be permitted to accept private fees from patients. The morale of the service can easily be upset in this manner, and the hospital will be open to criticism. *Does* pay attract better interns to the hospital? The answer is again, No. The really good men are distrustful of the hospital which offers them a salary. The intern's mental process is just this: "There must be something wrong with the service at that hospital if it must pay interns in order to get them."

As was said before, it is not imperative that a hospital be large in order to provide a good internship. A fifty bed hospital can give good general training, if well equipped and manned. Twenty patients who are acutely ill are enough for each house officer if he is to do his work efficiently and have the requisite amount of sleep and recreation. If unusually complete case records are kept, and the hospital is a teaching institution, perhaps one intern to fifteen patients is a more proper ratio. These matters are governed by the needs of the individual institution.

Carefully formulated rules and regulations for interns should be at hand. They should be read by every intern before he accepts the service, and they should be enforced to the letter by the hospital. Interns should not be permitted to shirk their work or to acquire lazy habits. It is much better to be lacking one intern than to keep a laggard in the hospital. Keep as careful a record of the work of your interns as your superintendent of nurses keeps of that of nurses in training. Let the interns know that it is being kept, and occasionally it may be wise to show them their record. Also, let it be known that this record will be used as a means of recommendation for positions. If an intern does good work in the hospital, do all that you can to assist him in securing the type of location which he may wish. This will frequently be an internship or residency in another hospital, which the superintendent, through his acquaintance with other executives, should be able to arrange.

To summarize: (1) The hospital which would have efficient intern service must provide a training school for interns which in many ways is analogous to the nurses' training school; (2) rather than exploit the service of the intern, the instruction should fully compensate the intern for his services by means of well-rounded, carefully directed training.



The above graphs, based on the statistics of fifty-eight hospitals of the United Hospital Fund, New York City, show that the patients who pay nothing at all themselves, in the two top sections, get more days of treatment in proportion to numbers than those who pay. This is because the poorest are in worse physical condition when they come and do not have good homes to go to for convalescence.

JOINT CATHOLIC HOSPITAL CONFERENCE TO BE HELD IN DULUTH

The next meeting of the Minnesota-North Dakota State Conference of the Catholic Hospital Association will be held at the Villa Scholastica in Duluth, July 18-19, it was decided at a recent session of the executive committee held at St. Mary's Hospital, Duluth. This delightful location will be an incentive for many to attend who might not consider going to a meeting at that season, it is believed. At the same time there will be an opportunity to see the splendid new unit of St. Mary's Hospital completed this year. Those who attended the executive committee meeting are as follows: Sister Olivia, St. Mary's Hospital, Duluth; Mother Conchessa, St. John's Hospital, Fargo, N. D.; Sister Adolphine, Loretta Hospital, New Ulm; Sister Leona, St. Mary's Hospital, Duluth; Mother Madeleine, St. Mary's Hospital, Minneapolis; Sister Bernard, St. Vincent's Hospital, Crookston; Sister Agnesina, St. Joseph's Hospital, Mankato.

DISCUSS OLD AGE PENSIONS

At the January meeting of the board of trustees of the American Hospital Association, a lengthy discussion of old age pensions for hospital executives took place. Several possibilities were suggested, but the board decided that the matter is complicated by factors not present in other fields of work. The question will be investigated further. However, the board was unanimous in its decision that the association should take the initiative.

NAMES A. H. A. COMMITTEES FOR 1923

President Asa S. Bacon of the American Hospital Association has made the following announcement of a partial list of committee appointments for 1923:

Special Committees

Gauze Renovation and Standardized Dressings

A. B. Denison, M.D., assistant director, Lakeside Hospital, Cleveland, Ohio.

Miss Clarabelle Wheeler, superintendent of nurses, Mount Sinai Hospital, Cleveland, Ohio.

Sister Cornelia and Sister Patricia, St. Vincent's Charity Hospital, Cleveland, Ohio.

Sister Amadeus and Sister Agnes Therese, St. John's Hospital, Cleveland, Ohio.

Guy J. Clark, purchasing agent, Cleveland Hospital Council, Cleveland, Ohio.

John D. Spellman, M.D., superintendent, Touro Infirmary, New Orleans, La.

Committee on Hospital Forms

A. C. Bachmeyer, M.D., superintendent, Cincinnati General Hospital, Cincinnati, Ohio.

F. E. Chapman, director, Mount Sinai Hospital, Cleveland, Ohio.

John F. Bresnahan, M.D., superintendent, Bridgeport Hospital, Bridgeport, Conn.

Committee on Hospital Flooring

F. E. Chapman, director, Mount Sinai Hospital, Cleveland, Ohio.

Committee on Relations Between Hospitals, States and Cities.

John E. Ransom, superintendent, Michael Reese Dispensary, Chicago, Ill.

Herman Smith, M.D., superintendent, Michael Reese Hospital, Chicago, Ill.

J. J. Weber, editor, The Modern Hospital, Chicago, Ill.

E. T. Olsen, M.D., superintendent, Englewood Hospital, Chicago, Ill.

Committee on Government Surplus Supplies

Winford H. Smith, M.D., director, Johns Hopkins Hospital, Baltimore, Md.

Thomas Howell, M.D., superintendent, The Society of the New York Hospital, New York City.

Joseph B. Howland, M.D., superintendent, Peter Brent Brigham Hospital, Boston, Mass.

Standard Specification of Canned Goods

Guy J. Clark, purchasing agent, Cleveland Hospital Council, Cleveland, Ohio.

Henry J. Southmayd, assistant director, Mount Sinai Hospital, Cleveland, Ohio.

Exposition Committees

Buildings: Construction, Equipment and Maintenance

S. S. Goldwater, M.D., director, Mount Sinai Hospital, New York City.

John M. Peters, M.D., superintendent, Rhode Island Hospital, Providence, R. I.

W. E. Woodbury, M.D., director, Fifth Avenue Hospital, New York City.

F. E. Chapman, director, Mount Sinai Hospital, Cleveland, Ohio.

Christopher G. Parnall, M.D., medical superintendent and director, University Hospital, Ann Arbor, Mich.

R. G. Brodrick, M.D., director, Alameda County Hospital, San Leandro, Cal.

Robert J. Wilson, M.D., director, Bureau of Hospitals, New York City.

H. E. Webster, superintendent, Royal Victoria Hospital, Montreal, Canada.

J. B. Howland, M.D., superintendent, Peter Bent Brigham Hospital, Boston, Mass.

Winford H. Smith, M.D., director, Johns Hopkins Hospital, Baltimore, Md.

General Furnishings and Supplies

Miss Margaret Rogers, superintendent, Lafayette Home Hospital, Lafayette, Ind.

Miss Mary L. Keith, superintendent, Rochester General Hospital, Rochester, N. Y.

Miss Margaret M. Cumming, superintendent, Christian H. Buhl Hospital, Sharon, Pa.

Miss Annette B. Cowles, superintendent, Children's Free Hospital, Louisville, Ky.

Clinical and Scientific Equipment and Supplies

Louis R. Curtis, vice president, St. Luke's Hospital, Chicago, Ill.

Foods and Equipment for Food Service

C. W. Munger, M.D., superintendent, Blodgett Memorial Hospital, Grand Rapids, Mich.

F. R. Nuzum, M.D., director, Santa Barbara Cottage Hospital, Santa Barbara, Cal.

Miss Marion Peterson, administrative dietitian, Lakeside Hospital, Cleveland, Ohio.

C. T. Johnson, superintendent, Washington Blvd. Hospital, Chicago, Ill.

Miss Alice Thatcher, superintendent, Christ Hospital, Cincinnati, Ohio.

Laundry Equipment and Supplies

W. P. Morrill, M.D., superintendent, Charity Hospital, Shreveport, La.

G. F. Stevens, M.D., superintendent, General Hospital, Winnipeg, Canada.

David H. Fuller, M.D., superintendent and medical and surgical director, Municipal Hospital and Dispensaries, Fall River, Mass.

DR. DENISON HEADS LAKESIDE

Dr. A. B. Denison was last month appointed superintendent of Lakeside Hospital, Cleveland. He succeeds Dr. R. H. Bishop, Jr., who resigned to accept the secretaryship of the University Medical School group in Cleveland.

Dr. Denison is only 32 years old, being one of the youngest superintendents of a large hospital in the country. He was graduated from Ohio Wellesley University in 1912 and received the degree of doctor of medicine at Western Reserve University in 1916. He became an intern at Lakeside Hospital and then resident physician.

In 1918, during the war, Dr. Denison was commissioned a lieutenant and was stationed at Edgewood, Md., in the gas defense service. After the armistice he returned to Cleveland to become assistant superintendent of Lakeside Hospital.

Dr. Denison is the fourth of his name and profession. The first Dr. A. B. Denison began practicing in Pennsylvania in 1797.

THE INFORMATION DESK

No satisfactory solution to a problem in your hospital is too trivial to pass on to other workers in the field. No question that perplexes you is too small to bring to the attention of those with greater experience in the field. This department is the readers' exchange, and its usefulness is dependent upon the measure in which its readers share their problems and their discoveries.

WHO SHOULD HEAR COMPLAINTS?

When a physician hears a complaint from his patient, should he refer it to the floor supervisor or to the superintendent of nurses?

This question put by one of our readers touches upon a problem which is constantly being met in the hospital. The answer to it will vary according to the organization, size of the training school, nature of the complaint, etc.

Unless it is some gross error the matter first should be taken up with the head nurse or the floor supervisor. That is what she is there for, to manage things smoothly and efficiently so there will be no complaints from either doctors or patients. In justice to her, she should know of the complaint first that it may be corrected, or the misunderstanding cleared up for the nurses are not always at fault. For example, a physician may tell his patient he may have some particular treatment or articles of diet and then forget to order them, not realizing his omission until he talks with the patient the following day.

On the other hand, if the same criticism comes up again it should be taken to the superintendent of nurses that she may investigate. The principal of most training schools already is swamped with detail but in spite of it she is more than anxious to know when things fail to run smoothly and she wants the physicians to come to her and not to go outside criticizing the type of nursing service they receive. In the very small school, the difficulties very naturally would go to the superintendent of nurses, but as the school or institution increases in size, this detail work is often delegated to assistants.

SURGICAL DRESSINGS AT MEAL HOURS

"What, oh what," appeals a small hospital superintendent, "can one do with doctors who insist on making surgical dressings at meal hours

Most hospitals have rules stating that dressings and rounds cannot be made during meal hours. Likewise most hospitals find that with slight relaxation, the attending men and particularly the interns begin to make rounds and dressings at such times and assume that the rule is forgotten; so the custom of rounds and dressings during meal hours is established.

If members of the medical staff are told that the patients' meals are neglected if nurses are taken away from this duty to make rounds and dressings, they usually will see the reasonableness of the rule and be glad to conform to it. Or if the situation is properly put to them, they will be very willing, if conditions are such that they must make rounds and do dressings during meal hours, to dispense with the services of nurses at such times. Of course, there is no question about interns: they can be ordered to do this.

If conditions are such that from the medical men's point of view it is absolutely essential to make rounds and do dressings over the meal hours, and because of the shortage of the personnel the meals are being neglected, one of the two following things may be done:

1. Prohibit nurses from accompanying attending-men on rounds, and if it is found that dressings can be done and meals served, to allow the nurses to help on dressings.
2. If there is not a sufficient nursing force to assist at dressings and to serve the meals, the hospital might:
   a. Employ additional personnel to cover this situation, or
   b. Forbid the nurses to assist at dressings during meal hours.

TEACHING INTERNS

Superintendent Louis J. Frank of Beth Israel Hospital, New York, has set down what he considers some essential principles in the teaching of interns. They are:

1. Upon arrival to the hospital, the intern should be assigned for one week to a senior intern to be taught how to take histories and make physical examinations.
2. The visiting physician should assign one case each week to every intern. This assignment should be in addition to routine work. The case should be studied, the literature reviewed; diagnosis made and treatment recommended. Once a week the intern should report on this case during rounds.
3. Such assignments will force the attendings to learn and to teach. They will have to be present at the weekly reports and discuss the intern's presentation.
4. Assistant attendings should demonstrate the use of new apparatus and of the performance of new tests in the wards.
5. All cases should be studied as type cases for the purpose of instruction, and as individual cases for the purpose of treatment.
6. To older interns should be assigned statistical studies or minor investigations, such as are deemed suitable by a committee on research for instruction.
7. This research committee should consist of the director of laboratories, *ex officio*, a visiting physician and a visiting surgeon.
8. Senior interns should be encouraged to present cases before medical conferences and to read reports of their investigations before the alumni association.

AN INVITATION TO CRITICIZE

To the list of forms for soliciting criticism from the patient concerning his care while in the hospital, which have been published in this department during recent months, Superintendent Louis Levy of Jewish Hospital, Cincinnati, adds the following, which has proved most helpful in his institution:

THE JEWISH HOSPITAL
CINCINNATI, O.

The Board of Directors of the Jewish Hospital are desirous of rendering patients the best possible service, and would welcome any suggestions that might add to the efficiency of the hospital.

I trust your stay has been as pleasant as possible under the circumstances, and the services rendered most satisfactory.

Very truly yours,
Samuel Straus,
President.

Criticism of service or treatment:

Suggestions for betterment :

Name .....

Date .....

Address .....

SAFEGUARDING STERILIZATION

What are the relative merits of "Diack" tubes and of a recording gauge attached to a surgical dressing sterilizer, asks a superintendent?

We have been using Diack tubes for some time at Mount Sinai Hospital, New York, says Dr. S. S. Goldwater, the director. We began using them before installing a recording gauge of any sort, and on one or two occasions they gave early indications of trouble with the sterilizers, and so proved their value.

A good deal might be said about recording gauges. Recording thermometers were installed in our sterilizing rooms some time ago; recently our thoughtful chief engineer pointed out that the recording thermometer in itself is not a reliable guide to the work that the sterilizer is doing, for it seems possible, without putting on the vacuum or introducing steam and getting thorough penetration of the contents of the inner chamber of the sterilizer, to record a temperature which, taken by itself, would seem to indicate sterilization; and yet complete penetration is indispensable.

For reliable service, there appears to be needed not only a recording thermometer, but an automatic record of pressures within the sterilizing chamber. Such a double check furnishes some indication that sterilization is effective. Add a Diack tube, and then, assuming that the "Diack" results are observed, and that the records of temperature and pressure are carefully studied every day, the check upon the whole system may be regarded as pretty thoroughly established.

Nothing satisfies surgeons, who are intent upon asepsis, quite so much as careful bacteriological tests. Such tests, covering the sterile water supply as well as surgical dressings, should be made periodically, as a routine laboratory contribution.

All of these precautions are superfluous where the apparatus is in good order, and is in charge of an intelligent and thoroughly conscientious attendant. But this is a department where no needless chances should be taken.

CONSTRUCTION AND CLEANING OF WALLS IN CITY HOSPITALS

A requisite for a clean wall is a wall that has been properly constructed and finished, says E. S. Gilmore, superintendent of Wesley Memorial Hospital, Chicago. Tile has been used for inside walls for so many years that most readers will be concerned with it only. The newer inside walls are largely made of composition whose principal ingredient is gypsum. It is lighter and freer from alkalis but it will bear less weight.

Tile absorbs sound and is fireproof. Outside walls of brick or stone should have an inside layer of porous brick. The tile and porous brick should be thoroughly dry when placed in the wall; otherwise, for a number of years saltpeter will exude and stain the wall. When the tile has been wet and there is a probability of saltpeter stain, it should be treated before plastering with a waterproofing material with an asphaltum base. The walls should be surfaced with three-fourth inch of rockhard plaster (plaster with a cement base) and a putty coat one-fourth inch thick. They should never be painted until they are dry and hard. It is much safer to calcimine walls for a year. When the walls have not been properly made and saltpeter stains show through the calcimine or paint, the affected parts should be waterproofed to neutralize the alkali in the tile. There is a trade preparation very satisfactory for this purpose.

Walls will last longer and look better if they are covered with canvas a little heavier than muslin. The canvas should be coated with three or four coats of filler and rubbed with sandpaper. If canvas is not used the putty coat should be covered with one or two coats of primer. When painting it is best to use two coats of interior flat paint. To obtain a glass finish one should add a little varnish to the paint. When thoroughly dry the walls should be starched as follows: Boil one teacupful of ordinary laundry starch in a quart of water until the starch is thoroughly dissolved, then pour into warm water (about 100 degrees), bringing it up to two gallons. Apply with a calcimine brush eight inches wide and five inches deep. The appearance will be much improved if the starch is stippled in, just as if it were another coat of paint. If the walls are painted a "Tiffany," instead of starch a flat, transparent varnish should be used.

Walls should be washed every two or three months. Nothing is gained by infrequent washing for dirt will sink into the paint, and during the effort necessary to remove the dirt some of the paint also will be removed. With frequent washing the starch or varnish will protect the paint and the dirt will be easily removed. Starch is removed with the dirt. If the walls are then re-starched, they will remain presentable without repainting it from one-half to two-thirds longer than otherwise.

For washing walls it is well to use a solution of ten quarts of water containing one-half of any good washing powder. A good washing powder will have a minimum of alkali. The solution should be applied with a sponge, the wall being rubbed gently with the sponge until the dirt and the starch are loosened. This then should be removed with a clean sponge and clean water. It is better to have one sponge and one pail for the solution and another sponge and pail for the clear water. The wall is then ready for re-starching.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Department of Nursing Education, College for Women,
Western Reserve University, Cleveland, Ohio

CENTRAL SCHOOLS OF NURSING IN CONNECTION WITH UNIVERSITIES*

BY CAROLYN E. GRAY, R.N., M.A., DEPARTMENT OF NURSING EDUCATION, COLLEGE FOR WOMEN, WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO.

NATURALLY my approach to the subject of central schools of nursing in connection with universities is influenced by the work I am attempting to do, and it would be more accurate to express the title of this paper in the singular number instead of the plural.

I know little of central schools, but I am learning something of the difficulties of organizing one central school, and perhaps something of our experience in Cleveland may prove interesting. You will agree with me that the essential difference between a central school connected with a university and other types of central schools is that the first should measure up to academic standards, that the nursing students should qualify for admission just as all other students do, and the work done should be of university grade and entitled to credit.

If you accept this definition you will probably agree that a survey of the existing schools of nursing is necessary, and gives one a valuable starting point. When the report of the Cleveland Survey was first published I thought it a remarkable and interesting book. But since I have been working in Cleveland I have come to regard it, and depend upon it, in much the same way that a tourist in a strange country depends upon his Baedeker. It is a perfect mine of information, and this information is assembled in such fashion that it gives first a bird's eye view of the whole problem, and then the detailed minutiæ that show up the similarities and dissimilarities of our schools in a truly remarkable way. I count it great good fortune to have had this report, for it has been a veritable guide in my visits to and study of various hospitals.

There are twelve registered schools of nursing in Cleveland and these vary within rather wide limits. Some are very good, and some are operating under great difficulties. The number of new students required each year is about 300, but this represents the number that can be accommodated in limited quarters rather than the number actually needed. Plans for building five new hospitals (Lakeside, Maternity, Children's, Huron Road, St. Luke's) are under consideration and when completed the need for students will probably be doubled, because this list includes our largest and most active hospitals. In every instance the bed capacity is to be decidedly increased. In addition City Hospital is adding new pavilions at a rapid rate, and each new pavilion calls for an increased number of students. Each of the five new hospitals has to meet the problem of providing dormitories for its students and graduate staff. A sixth hospital, Mount Sinai is also planning to build a dormitory for its students.

One School Building for All

Invariably the question arises: Shall each school provide laboratories and teaching facilities in its dormitories, thus building six teaching sections, one for each dormitory? Or shall they combine their classrooms, and erect a school building that will serve their needs, and also serve the teaching needs of other schools that may wish to take advantage of such an arrangement? There is very general agreement that a school building will best serve the needs of the various hospitals, and will take care of increasing needs most readily.

Accordingly, we have come to think of our central school as one of the three branches of a complete university school, which is our ultimate goal. And this idea of a central school has taken deep root in our hearts and minds, for it offers not only a solution of many teaching problems, but a constructive plan to meet prospective needs. May I say right here, that our building is, as yet, only a thing of dreams and hopes, aspirations and ideals; nevertheless in imagination it often takes shape and we see laboratories for classes in nursing procedures, chemistry, physics, bacteriology, nutrition, anatomy and physiology, also a rest room for our students, a reference library and offices for the various instructors.

And these instructors we picture as members of the faculty, having both university and hospital connection. We have even pictured our location, (not perhaps the exact plot of ground, but as near as possible to the College for Women). It is planned that each nursing school will continue to admit and house its own students, so that each will locate its own dormitory as near the hospital they serve as they wish. But because the central school is to be the teaching building for many hospital schools, it seems wiser that it should align itself with the college which is pre-eminently concerned with the education of women. Moreover the nursing students will benefit by this connection and have a share in the cultural opportunities, traditions, and atmosphere of college life. On the other hand, the college students will see *nursing* as one of the professions for which they may fit themselves, and a mingling of both groups of students will do much to break down

*Read at the last annual meeting of the National League of Nursing Education, Seattle, June, 1922.

the isolation of our schools and bring about a recognition of the common elements in our problem, for both the college and the schools of nursing are striving to educate women to live up to their highest levels of usefulness.

Students to Get Academic Credit

All these dreams of our physical plant have not deterred us from spending the major portion of our time in planning such reorganization of our curriculum and hospital experience as will make it possible for our students to have their work recognized in terms of academic credit. We expect our central school students to matriculate at the college, and even though their professional education will *not* entitle them to a degree, it will entitle them to a certain amount of credit toward a degree, so that if at any future time they wish to return and complete their work for a degree, they will be recognized and accepted just as any other student whose course has for any reason been interrupted.

This whole plan presupposes that the opportunities offered in the various nursing schools that expect to become affiliated with the central school shall be comparable and of equal value. The social conscience and cooperative spirit that are characteristic of Cleveland prompted the decision to extend university affiliation to any nursing school that is willing to comply with certain standards. These standards are based on the survey recommendations, and were worked out in conference with representatives of the nursing schools, and a special committee from the faculty of the College for Women.

Standards for Affiliation

These standards are as follows:

1. *School of Nursing Committee*—That each school affiliating with the college shall have representation on the committee of citizens supporting this work.

2. *Committee on Affiliation*—That applications for affiliation between a hospital school of nursing and the college shall be made to, and acted upon, by a special committee appointed by the college. This committee shall consist of one member from the committee of citizens supporting this work, one member from the faculty committee on nursing education, one superintendent of a nursing school nominated by the local league of nursing education, and the director of the department.

3. *Budget*—That the budget for the school of nursing shall be separate from the general budget for hospital expenses.

That all instruction, whether given in the college, school classrooms or hospital wards, shall be paid for.

That there shall be a definite understanding of the amount of time to be spent in teaching by persons who serve in the dual capacity of administrators and instructors. Such services shall be paid for separately and charged to the budget of the hospital or school as the case may be.

That for a period of five years schools shall be allowed to operate under plan 1 or 2:

PLAN 1. Entrance fee of $25.00. During preliminary term school provides board, lodging and laundry. Student provides own textbooks. After preliminary term school provides board, lodging, laundry, uniforms and textbooks.

PLAN 2. Entrance fee of $25.00. During preliminary term school provides board, lodging and laundry. After preliminary term school provides board, lodging, laundry, and pays student an allowance of $15.00 per month which is intended to cover cost of uniforms and textbooks.

4. *Entrance Requirements*—High school graduation or equivalent acceptable to the college. 18 years of age.

5. *Preliminary Period*—That there shall be a preliminary period of four months during which elementary nursing and the basic sciences are to be taught. Work on the wards during this period shall be only in connection with classroom teaching.

6. *Basic Training*—(a) That there shall be a basic training of two years and four months. (b) That the education offered during the two years following the preliminary term shall be in accordance with the following schedule:

CLASS WORK IN HOSPITAL

	Credits
Drugs and solutions, materia medica and therapeutics	3
Medical nursing including pathology and diet in disease	4
Surgical technique, surgical nursing and nursing in specialties: orthopedic, gynecological, eye, ear, nose and throat	4
Obstetrical nursing	2
Pediatric nursing	2
Communicable diseases (to include incipient tuberculosis, social diseases, skin, and occupational)	5
Mental hygiene and mental and nervous diseases	3
Massage and occupational therapy	2

Practical experience in all these branches. Class work to precede or be simultaneous with practical experience.

TIME ASSIGNED TO VARIOUS DEPARTMENTS

	Months
General medical including diet in disease	4
General surgical including surgical or medical dispensary	4
Operating room or accident ward	2
Vacation	1
Obstetrics	3
Pediatrics	3
Communicable diseases	3
Mental and nervous	3
Vacation	1

(c) That in addition eight months of elective work shall be offered. This elective work shall include special opportunities in nursing of private patients, surgical nursing, nursing of children, public health nursing, teaching, supervision, and giving of anesthetics.

7. *Clinical Facilities*—That each school shall provide adequate clinical facilities for instruction, not only in the four main branches, i.e., medical, surgical, children's diseases and obstetrics, but also in communicable diseases and mental and nervous disorders.

8. *Correlation of Classroom Instruction and Hospital Training*—That classroom instruction shall precede or be simultaneous with ward training. Class work shall be repeated for different sections to make this possible, and shall be in accordance with schedule.

9. *College Credit*—That all nursing students who wish college credit shall submit a statement of their professional training (including theory and practice) on blanks to be provided by the college.

10. *Vacation*—That a vacation of one month shall be allowed each student the first and second year.

11. *Hours of Duty*—That the hours of day and night duty shall be limited to 44 hours per week.

12. *Night Duty*—That night duty shall be limited to 12 weeks, no term of which shall be longer than 4 weeks.

13. *Provision for Supplementary Services*—(a) Graduate nurses shall be in charge of wards and provide for adequate teaching. Two-thirds time charged to administration. One-third time charged to instruction.

(b) Graduate nurses shall supplement number of the students needed to staff the wards. The hours of head nurses shall be limited to 48 hours per week.

(c) Ward helpers for duties exclusive of those needed for education and experience of the student.

Two Years to Meet Standards

Much time has been spent in visiting hospitals, and in meeting various boards and interested groups for the purpose of presenting and explaining these standards. This has been a very interesting part of the work, for it has afforded opportunity for acquaintance and mutual understanding based on the give and take of friendly discussion. *All* of the schools are interested; many are definitely planning to put our requirements into effect. The general response has been a frank recognition of the difficulties inherent in such a task, coupled with eagerness to make a sincere attempt to do so. Repeatedly we have put the question: Shall we go ahead without attempting standardization? The answer has always been an unequivocal, *No.* A few schools recognize that they cannot qualify but bear us no ill-will, and are content to jog along in their own way. As our project will not injure them, there is no reason why they cannot do so, possibly more successfully than heretofore, because all applicants who cannot qualify for admission to the central school will be referred to them.

We estimate it will take at least two years for our most forward-looking hospitals to qualify because the changes required are far-reaching, and must be made gradually in order that the work of the hospitals shall not suffer.

While waiting for our plans to materialize we have conducted several courses for the graduate nurses employed as instructors, supervisors and head nurses in our various schools. The purpose of these courses has been to develop an appreciation and understanding of our project, so that we may be able to count on a certain degree of likemindedness in those who occupy such key positions. Further progress depends upon an endowment to cover (a) the cost of erecting a teaching building; (b) the cost of furnishings and laboratory equipment; (c) the upkeep of the building, light, janitor service; and (d) salaries.

SUMMER COURSE AT STANFORD

President Ray Lyman Wilbur of Stanford University, Palo Alto, Cal., has authorized the giving of a special five-week summer course for administrators and instructors in schools of nursing, beginning in June. It is expected that the course will prove especially attractive to graduate nurses of the West and Middle West.

INSTITUTE FOR INSTRUCTORS IS GREAT SUCCESS

As Reported by ELSA SCHMIDT, R.N., Visiting Instructor, Schools of Nursing, New York City.

TO HOLD an institute in New York City, long has been a cherished hope of the executives of the New York State League of Nursing Education. This hope was the outgrowth of the constantly increasing demand for better instruction and particularly for more adequately prepared instructors in our schools of nursing. It was believed that an institute of short duration would be helpful to both supervisors and instructors, who, for various reasons were prevented from attending the courses offered in the department of nursing and health, Teachers College, Columbia University.

The New York State League is organized in various sections and it was thought best for two sections, Nos. I and V, which are in such close proximity, to unite in formulating plans for the institute. Early in September a circular letter was sent to the directors of all the schools of nursing in the boroughs of Manhatten, Bronx, Brooklyn, Queens, Richmond and West Chester, stating the purpose and plans for an institute and asking for cooperation.

The interest and enthusiasm expressed in the letters received encouraged us to make more definite plans. At the executive meeting of Section No. 1 held in November, it was decided to appoint a chairman, leaving her free to select her own program committee and make plans for the institute. The chairman secured the following members to act with her: Miss Bayley, director of education, Bellevue School of Nursing; Miss Elizabeth Burgess, instructor in nursing and health, Teachers' College; Miss May Robinson, director, school of nursing, Long Island College; Miss Mabelle Walsh, executive secretary, Eastern Council of Nursing Education. The first week in January was decided upon as the most suitable time.

Institute Opened January 2

The first session was held January 2, 1923 at Nightingale Hall, the nurses' residence of the Presbyterian school of nursing. A large number of nurses were present.

Owing to the absence of the president the meeting was opened by Miss Helen Young, the secretary of section No. I, who explained briefly the aim and plans.

Miss Kate Madden, president of Section No. V, made a brief response expressing her pleasure in the progress that had been made. She expressed the hope that similar institutes may become a permanent part of the activities of the New York State League.

The address of welcome was given by Miss Anna Maxwell, who, with her usual wit and vigor, launched the activities of the sessions in her own inimitable fashion.

Practically the entire first day was given over to the teaching of principles and practice of nursing, a major subject in the curriculum of schools of nursing.

Miss Elizabeth Burgess, instructor in nursing education, Teachers' College, introduced the subject from the point of view of the supervisor, speaking most emphatically on the need for better supervision and on the importance of developing better-qualified instructors and supervisors.

There followed a helpful address by Miss Isabel Stewart, assistant professor of nursing, Teachers College, on "How to Judge Nursing Standards." Miss Stewart presented eight important standards for judgment, each illustrating a specific and important phase in the attempt to reach that 100 per cent efficiency in nursing practice. The importance of securing more scientific methods in developing our technique, and in checking up our results was strongly emphasized by the speaker.

In the afternoon an interesting class in practical nursing was conducted by Miss Helen Young, director of the school of nursing, Presbyterian Hospital, her particular subject being "How to give a Colon Irrigation." In this lesson many helpful subjects, from the standpoint of guiding principles of teaching as well as simplifying technique, were included.

Miss Ink, visiting instructor in New York City, then presented the important topic, "How to Prepare a Lesson." Miss Ink's suggestions in the use of illustrative material were particularly helpful.

Following the program of the first day a tea was given by the students of the Presbyterian school of nursing.

The next morning, January 3, a large group of members assembled at Teachers College to attend a class in chemistry taught by Miss Charlotte Francis. The students were a group from the department of nursing and health.

Miss Nutting Gives Inspirational Talk

One of the most highly appreciated contributions to the program was an address made by Miss M. Adelaide Nutting, professor of nursing, Teachers College, on "The Work of the Instructors in the Schools of Nursing." Her address was a stimulus to every instructor present: in the first place to become a really great teacher of nursing as we have had great teachers of medicine; in the second place to make a much more effective use of the many vital principles which the study of psychology is constantly revealing; and finally, to develop closer relationships with other members of the faculty through conferences and committees.

An attendance of about 150 members gave witness to interest in the topic, "Teaching Students to Acquire Skill," ably presented by Miss Whitley, assistant professor of education, Teachers College. Miss Whitley told us how to utilize psychological resources, and nature's endowment of instincts and emotions, in teaching students the acquisition of skill. Equal emphasis was put on the importance of a definite plan at the outset of the lesson, the right kind of demonstration, and plenty of practice under the most favorable conditions.

In the afternoon of the same day Dr. William Bagley, professor of education, Teachers College, spoke on, "Types of Teaching." Dr. Bagley outlined the effective use of the different types of teaching, pointing out our own advantages in being able to apply, almost immediately, the knowledge and skill acquired in the classroom to the real situation. He further called attention to the importance of ethical teaching in the development of professional ideals and standards through the use of example, through the study of the lives and the contributions made by the leaders in the profession, and through the entire atmosphere of the school.

In spite of a heavy snowstorm quite a large group took part in the excursion to the conference room of the headquarters of the National Health Council in the Pennsylvania Terminal Building, 370 Seventh Avenue. Here Dr. Donald Armstrong, director of the Health Council,

gave the first address presenting briefly the nature of the organization of the Health Council and its present activities. Dr. Armstrong was followed by representatives of each of the following organizations:

National League for Nursing Education—Miss Ellie Taylor.
American Nurses Association—Miss Agnes G. Deans.
American Journal of Nursing—Miss Mary M. Roberts.
National Organization for Public Health Nursing—Miss Anna A. Stevens.
American Social Hygiene Association—Dr. William F. Snow.
National Tuberculosis Association—Mr. Philip P. Jacobs.
Child Health Organization or National Child Health Council—Miss S. L. Jean.
American Society for Control of Cancer—Mr. Frank Osborne.
Use of the Library—Miss Florence Bradley.

Another heavy snowstorm during the night did not prevent the members from turning out very early on January 5, to attend a class in household economics by Miss Mary Pillsbury, instructor in the Long Island College School of Nursing. The class was held in the amphitheater of the Long Island College Hospital, and the subject presented was, "Removal of Stains."

This class was followed by an interesting medical clinic on, "The Symptoms and Treatment of Diabetes" by Dr. Luther Warren, professor of internal medicine, Long Island College Medical School. The interest expressed by the students was concrete evidence of the value of the clinical method of teaching over the lecture, often hurriedly presented by someone with too little leisure for adequate preparation.

Make Excursion to Bloomingdale

The excursion to Bloomingdale Hospital for Mental Diseases was one of the most enjoyable and beneficial experiences of the entire week. The recent snowfall followed by sunshine resulted in a most glorious winter scene for the visitors, and added much to the spirit of the excursion.

The first paper by Miss Adele Poston was entitled, "Practical Aspects of Mental Nursing." Then followed an address by Dr. William Russel, medical director, on "Educational Work at the Bloomingdale Hospital." After a brief history of the important work that had been accomplished at the hospital, Dr. Russel dwelt especially on the need for instruction and practice in psychiatric nursing for all students in schools of nursing.

Dr. Frankwood Williams, medical director, National Committee for Mental Hygiene in his address, "The Place of Mental Hygiene in Nursing Education," called attention to the failure of nurses in general to perceive the need for this subject, social workers having long taken advantage of courses offered. Dr. Williams put special emphasis on making mental hygiene a basic subject, not merely a frill, in our curriculum. This would help the young student to recognize early signs and symptoms of mental illness.

Two nurses of the recent graduating class gave two neat demonstrations, the first a pack for sedative purposes, and the second a continuous bath. The technique of both procedures was particularly good and reflected credit upon the instruction given.

A tour of the hospital with its elaborate equipment, particularly in the department of occupational therapy, revealed great progress in this branch of modern medicine. A happy social hour followed.

Outlines Teaching of Drugs and Solutions

Early the next morning an eager group met in the auditorium of Mount Sinai Hospital, where Miss Maude Muse, instructor in nursing at Teachers College, presented an outline for the teaching of drugs and solutions. Miss Muse was most painstaking in her exposition and in presenting valuable illustrative material.

A visit through the educational building of the Mount Sinai school of nursing was much enjoyed. The splendid teaching equipment and class rooms excited great admiration.

Perhaps the most enjoyable class was in anatomy and physiology, taught by Miss Lydia Anderson, visiting instructor. This was given to the preliminary course students of the New York Hospital school of nursing. A high degree of originality and practical application, which can only be gained by long experience and study, was in evidence. With these were combined a sense of humor which created a pleasant atmosphere and stimulated the students to try to understand a very difficult lesson on the nervous system.

The excursion to the central building of the Henry Street Visiting Nursing Service, 99 Park Avenue, was attended with great interest and enthusiasm. Miss Annie W. Goodrich, in a most inspiring way, pointed out the vital need for the instructor of nurses to include a broader background of public health nursing in her preparation. This wider vision would hold before her the picture of the needs of the home and community and tend to secure her cooperation in developing more complete courses in pediatrics, obstetrics, etc.

Desire for Annual Institute

On the morning of January 6, at 9 a. m. the members of the institute met in the classroom of the Bellevue School of Nursing to attend a class in hygiene taught by Miss Elsa Maurer, assistant director of education. Miss Maurer demonstrated an inspiring method of teaching hygiene through the utilization of such worthy motives and ideals as could not fail to grip the interest and enthusiasm of everyone of the students present. The indices of perfect health as expressed not only in terms of economy of time, but primarily in terms of better and more helpful human relationships and altruistic service, assumed a fresh importance to each individual.

In the afternoon a large group took part in the excursion to City Hospital, Welfare Island, where Miss Theodora Le Febvre, the president of Section No. 1, with the aid of her staff, had prepared for us a most enjoyable afternoon. Gathered at tea around the fireplace in the comfortable nurses' home everyone present voiced the success of the institute. The hope was generally expressed that similar institutes might become a yearly event in the activities of the New York State League of Nursing Education.

NEW TRAINING SCHOOL PUBLICATION

The Brandon Training School for Nurses recently has issued the first copy of its official organ, *The Training School Times*. This has been published by the Student Nurses' Council, and is a magazine attractive in appearance and of good style. It covers sixty pages, full of interesting reading matter of local interest and amusement to the training school, indicating originality and talent in the group, as well as showing a fine *esprit de corps* in the school. The cost of this publication is met mainly by revenue from carefully selected advertising.

A similar magazine is issued annually by the Training School for Nurses of the Vancouver General Hospital, but is more of a valedictory publication dedicated to the graduating class.

Such publications mean a great deal of work, but they often reveal hidden talents and originality. Above all, they create fine school spirit. This ultimately means a stronger nurses' alumnae association.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

THE DUTY OF THE MANUFACTURER TO PROVIDE CLEAN AND SAFE FOOD*

By JOHN P. STREET, Rochester, N. Y.

SINCE the passage of the Federal Food and Drugs Act in 1906 the whole question of food adulteration has undergone a decided change. Whereas formerly in the purchase of many kinds of food products the purchaser, unless peculiarly alert and well informed, was more than likely to receive sophisticated foods, often containing ingredients actually dangerous to health, today such adulterations are rare indeed, and food adulteration in the strict sense of the term has become a matter of academic interest rather than one vitally affecting the health of our people.

It is true of course that certain classes of foods, often of a more or less compound nature, frequently must be classified as illegal foods because of errors in labeling which make them technically adulterated. Generally speaking, however, most of our food products show a gratifying increase in purity. The problem of the future will be in part the insistence that legal food shall also be pure food, but even more the requirement that all of our food shall be made from good, sound raw material, and that the manufacture, sale and handling of foods shall be conducted in a sanitary manner.

Confirming the statement I have just made relative to the increased purity of foods, a review of the situation in Connecticut covering a period of eighteen years shows that we examined 26,102 samples of food and that among the simple foods the freedom from adulteration increased from 59 to 90 per cent, while among the compound foods the increase was from 27 to only 34 per cent. However, this lack of purity in the compound food was due chiefly to technical adulteration and reflected on the quality of the product rather than on its healthfulness.

At the present time, therefore, the problem of those who are responsible for the purchase of food in the home or the institution is rarely connected with food adulteration. Unadulterated food, however, is only one phase of the food problem. Perfectly good, nutritious and wholesome food may go to the food manufacturer and by faulty processes, slovenly methods or insanitary practices be rendered less nutritious and wholesome, or in extreme cases become dangerous to the consumer. On the other hand, food may be prepared commercially with every attention to sound raw material, proper manufacturing technique and the best modern sanitary practice; it may leave the factory or packing house a safe and wholesome food in every particular, and yet be rendered unsafe and unwholesome by careless handling in the institution, hotel or private home where it is consumed. Such a condition is more prevalent among "fresh" foods that go to the consumer in their natural condition or which undergo no manufacturing process. In fact, foods of this class are generally speaking by far a greater source of danger than processed foods, for the latter have usually undergone a cooking process that very greatly increases their margin of safety. The insanitary refrigerator in the home or institution is probably the most common source of food infection, and too much attention cannot be given to make and keep it clean and sweet.

Consumer's Care of Food Products

The Federal Meat Inspection Act practically assures the consumer that the meat he buys is sound, is free from pathogenic organisms and is packed in a clean and sanitary packing house by clean workers, free from infectious or contagious diseases. Government inspected meat is sound and wholesome when it leaves the packing house, practically without exception, and in the transportation of the meat products from one state to another, the government still maintains a careful watch that the product on which it has placed its stamp of approval is not allowed to deteriorate during transit due to careless or unintelligent handling. Once in the local market the responsibility for its proper keeping rests on the wholesale and retail dealer, under the supervision of the state or municipal authorities. When the meat is not government inspected, as in the case of local slaughterhouses, inadequate supervision may cause a distinct menace to the health of the consumer. But no matter how much care is exercised by federal, state or municipal authorities, the responsibility for the proper keeping and final preparation of the meat in the home rests very largely on the ultimate consumer, just as with all other classes of foods.

Many safeguards, likewise, are thrown around the production and sale of milk. Unfortunately, however, raw milk is peculiarly liable to infection and, in spite of official inspection, sickness due to contaminated milk is not infrequent. Here again all the advantage gained by official supervision of the production and handling of the milk may be lost through improper care after it reaches the consumer.

*Read before the American Dietetic Association at its annual convention in Chicago, October 26, 1921.

In most of our progressive states sanitary codes are in operation which in a measure safeguard our food products during the various stages of manufacture and sale. There are so many food manufacturing plants, so many warehouses, so many shops, however, that proper official sanitary control of food establishment is almost impossible because of the cost involved. In this connection, it is an interesting sign of the times that certain industries are realizing the importance of a strict sanitary control in their manufacturing processes, due in part to their appreciation of their obligation to the consumer to produce clean products packed by clean people in a clean factory, and in part due to their conviction that any food producer who is not willing to meet such requirements is a detriment to the industry and is entitled to no place in their counsels or in their trade associations. The National Canners Association already has taken such a stand and it is understood that the baking industry is contemplating a similar system of self-inspection, so that more and more the consumer will be able to buy prepared foods with the assurance that the manufacturer has done everything in his power to render his product safe and wholesome and worthy of confidence.

Canners Out for Sanitation

During the past two years I have been connected with the inspection service of the National Canners Association, and I am glad to have this opportunity of explaining the reasons for this self-inspection, its underlying principles and what it is hoped to accomplish. To some of you I may be known as a pure food advocate, who in the earlier days of strain and stress was often lined up against the food manufacturer, and who was often, I realize now too often, inclined to look upon the average prepared food with more or less suspicion. Those days of working together in close harmony in a real constructive controversy are fortunately past and today the common experience is to find food officials and manufacturers program. In fact, one important department of our organization at the present time is planning active cooperation with food officials to correct unsatisfactory conditions in our own industry. My translation, therefore, from the ranks of the food officials into the inner councils of the canners has been a simple process without any straining of my conscience and without any dulling of my sensibilities as to my responsibility to the consumer. In fact, my two years' connection with the association has been of distinct educational value to me, and by my intimate personal contact with the men who lead in the councils of that association I have been impressed with their high motives, their broad vision and their keen sense of responsibility to the consuming public as well as to the industry they represent. For the past two years the association has been committed to a plan of publicity and inspection. The keynote of its publicity is truth; that of its inspection, sanitation.

The canning industry has been the victim of indifference, inefficiency and ignorance within its own ranks, and of newspaper sensationalism, prejudice and sometimes ignorant official interference from the outside. The truth about canned foods has been neglected to such a degree that even today a large element of our population makes no use whatever of canned foods and a still larger proportion uses them only in a limited way and far below that which their excellence, wholesomeness and purity deserve, with an almost complete ignorance of their value in the preparation of a nutritious, well-balanced dietary for the consuming public.

When one considers the history of this industry it is not hard to understand how some of these misunderstandings and prejudices have arisen. In the early days, cannery equipment and cannery buildings were of the crudest sort. The early canners were fishermen or farmers, and the most convenient shed became the canning factory. There was little about those plants that was attractive, and often much that was unattractive, and the first seeds of public distrust were sown. Likewise in the early days there was no grading of canned foods and necessarily these suffered when compared with foods carefully selected and prepared in the home kitchen. There was little appreciation on the part of the canner himself of the importance of quality as determined by color, flavor, tenderness and sweetness, and this too reacted against the commercial product. Similarly for a long time the tin can itself was viewed with suspicion and by many was not considered a proper container for human food, and the fact that from its very nature the contents of the can could not be seen until after purchase still further led the consumer to believe that tinned food was to be avoided. So it must be recognized that in the minds of many of our people there is a distinct prejudice against canned products, a prejudice, to be sure, founded on the exception and not the rule, but nevertheless a prejudice that must be eradicated before the canning industry can come into its own.

Canners Association Has Strict Code

Realizing these prejudices, the National Canners Association recognizes that the basis of its membership must be a clean product packed by clean people in a clean cannery, so the first requirement for membership in the association is compliance with sanitary regulations that are more exacting than the sanitary codes in force in most of our states. These requirements, while stringent, are not unreasonable and simply provide for a clean, well-painted, well-lighted and ventilated cannery with ample facilities for washing the machinery and the plant; that clean, sound products be packed in clean cans; that adequate lavatories and well-painted, lighted, ventilated and screened toilets be installed; and that the operatives be clean as regards their person and dress.

In what I have said I have barely referred to the details of what should constitute a good and thorough sanitary inspection. That I believe you know quite as well as myself and it would be trite and a waste of your time to enlarge upon the necessity of abundance of sunlight in the plants, an ample water-supply, clean machinery, clean and healthy workers and the prevention of spoilage of the product from the time it comes into the cannery until it reaches the consumer. These facts are self-evident and need no further emphasis at this time.

Aside from the prejudice existing against canned foods the industry has suffered greatly from unfair and ill-advised published accounts of alleged cases of poisoning for which canned foods have quite commonly been held responsible. Canned foods have too often been the goat on such occasions and the usual practice has been for the physician or the reporters to determine by a relentless search whether or not some time in the later stages of his life the unfortunate victim of the alleged poisoning might have been rash enough to eat some tinned product. If such evidence were forthcoming, nothing else was necessary for those experts to announce in startling headlines the unhappy fate of this the latest victim of "ptomaine poisoning" from the ingestion of a canned food.

As a matter of fact it is the rarity of such occurrences that gives these alleged poisonings their news value. For many years "ptomaine poisoning" was the term com-

monly applied to these cases both by physicians and the press. Through long process of study ptomaines have become better understood, and our disseminators of news have been gradually educated to their real significance, until at the present time the public intelligence is seldom insulted by the loose use of the term, which was once so common. The researches of Rosenau and others have shown that there is no ptomaine problem as far as canned foods are concerned, that frequently no canned food whatever was consumed by the victim, that in many cases where such food was eaten it was proved to be wholesome in every particular, and that in many instances the acute gastro-intestinal disturbances observed were not due to harmful foods of all kind. Erroneous diagnoses were common. Symptoms attributed to ptomaine infection were in reality often found to be due to indigestion, indiscret diet, excessive eating when fatigued, or to nervous or emotional exhaustion, and further, "ptomaine poisoning" has been mistaken for cerebrospinal fever, malignant tumor, anaphylaxis and dysentery. The "ptomaine poisoning" myth as applied to foods, especially canned foods, has by this time been pretty well exploded, but during the past two years the public has been fed up on a newer form of food poisoning, and because of several rather serious local outbreaks the term "botulism" is rapidly becoming a household word.

Botulism Rare in this Country

While botulism poisoning has been fairly common in Europe, in the United States it is one of the rarest of diseases. Again it is true, however, that this very rarity, coupled with the disease's high mortality and the distressing symptoms that accompany it, gives botulism its news value, and far more prominence has been given to it than is warranted by its importance. The deaths caused by botulism are quite insignificant when compared with the toll exacted by several of our familiar diseases, whose victims seldom excite any journalistic interest. Tuberculosis, diphtheria, septic sore throat, typhoid fever and paratyphoid fever are familiar diseases which may be conveyed by some of our commonest foods or by the water we drink, but to my knowledge none of these diseases has ever been connected, even remotely, with canned food. It is unfortunately true that in a few instances a commercially canned food has been the means whereby the botulinus toxin was conveyed to the unfortunate victim, but when one considers the billions of cans of food that have been consumed in this country each year for the last forty or fifty years, and the extremely few cases of botulism that can be justly attributed to such foods, it is more than a ten to one shot that you may die from such a rare disease as hydrophobia or that you may be struck by lightning, rather than that you may perish from botulism, the present pet journalistic disease. As stated in an earlier portion of this paper, the common insanitary condition of refrigerators, both in institutions and in the home, should give us infinitely more concern than the extremely remote possibility that the botulinus toxin may find lodgment in our systems through the medium of canned foods.

However, the National Canners Association, realizing that certain canned products have received undeserved unfavorable publicity in this connection, and appreciating its duty to offer to the American public only foods in which it may have the completest confidence, has undertaken certain investigations which it is believed will completely remove even the most remote danger of botulism from the ingestion of canned foods. With your permission I will outline very briefly the work that has been done by the association in this connection, and that which is now in progress.

Scientific Study of Food Poisoning

At the time of the organization of the National Canners Association in 1907, newspaper announcements of "ptomaine poisoning" were frequent and the association realized the necessity of following up all such alleged poisonings to determine if canned foods were in any way responsible for them. It was appreciated almost at the outset that scientific knowledge of the subject of food poisoning was far from complete and that unfortunate and misleading terminology was in common usage. A special study of the subject was made by Dr. R. S. Page of Bel Air, Md., who reported critically on the alleged cases of poisoning. The necessity for a systematic investigation of the whole subject was evident, and it was realized likewise that this matter could be handled adequately only by medical laboratories equipped with medical and physiological apparatus and with men trained in those fields. The National Research Council, soon after its organization, was interested by the association in this subject and Dr. M. J. Rosenau, head of the department of preventive medicine and hygiene, Harvard Medical School, was named by the council as director of the work. This work was organized in the spring of 1917 and continued according to the original plan for a period of three years. Under the arrangement with the Harvard Medical School this study of food poisoning with special reference to canned foods was to be characterized by the broadest academic freedom and the results published as is usual with scientific articles. It was understood at the start that Dr. Rosenau was to publish his results independently and that reports of his work were not expected by the association.

Found No Poisonous Bacteria

In this investigation attention was first directed to the bacteria occurring in canned foods and in open market foods. It was found, quite naturally, that foods sold in bulk were always contaminated with micro-organisms of the widest possible variety. Samples of canned foods sent by canners in all sections of the country were examined, as well as samples secured in the open market. The canned foods were incubated for a time to give every possibility for spoilage in case any bacteria were present, were then opened, samples taken for laboratory examination and the balance used at an experimental mess maintained by the workers in the laboratory. This table was continued for several months. The bacteria found living in the various cans were identified and recorded, but it is interesting to note that no cases of illness resulted to any of the eaters of these foods, except some trivial colds which could not in any way have been due to the ingestion of these foods. Of course, the foods used at this table were from cans that were apparently sound, but Weinzirl, working with Rosenau, also examined bacteriologically a number of swells and found no poisonous bacteria. In this work and in fact in all of the work of Dr. Rosenau no botulinus organisms were found, although intensive study of botulinus was not begun until a later stage of his work.

Rosenau's laboratory also studied the subject of ptomaines from a chemical standpoint. The results were negative, and in spite of a study lasting over three years he was unable to find any ptomaine which was poisonous when taken by mouth. As a result of this work Rosenau pointed out a fact, noted by others, namely that the earlier methods for the determination of ptomaines depended on the separation of the ptomaine by volatile solvents from

acid and alkali solutions, these extracts when inoculated into guinea pigs causing death. However, extracts obtained by these same methods from sound meats, when inoculated into guinea pigs, likewise caused death, the poisonous substances probably being caused by the action of the acid and alkali on the protein matter. When given by mouth, however, these foods were not poisonous.

New Processes Free from Botulism

Dr. Rosenau also secured cultures of all of the known bacteria which secrete poisons and which may produce food poisoning, and studied the metabolism of the bacteria and the influence of the toxin. The properties of the toxins were studied, as well as the manner in which they were produced, and their resistance to heat. In the earlier stages of his work, botulinus was studied incidentally with other organisms; Orr, formerly of Iowa State College, assisted in the work, and since then has devoted his entire time to the study of botulinus. In the summer of 1919, however, when the Canton and Detroit outbreaks of botulism occurred Rosenau began to study this particular form of poisoning systematically and since then has given it special attention. The importance of the subject was so great that arrangements were made by the association to conduct the work on broader lines, and in the winter of 1919-1920 Dickson of Leland Stanford and Meyer of the University of California began active cooperation in the investigation. Furthermore, the U. S. Public Health Service assigned Dr. Geiger to work with Dr. Meyer on this subject, giving special attention to the epidemiology of the disease. Geiger has studied outbreaks of botulism, has seen and treated the patients, and has investigated the plants in which the products were produced and the fields in which the raw products were grown. He has secured samples of food wastes, soil in many localities on the Pacific Coast, and recently has been gathering similar samples from all parts of the country to enable an attack on the problem from every possible angle.

This work on food poisoning goes far beyond the responsibilities and duties of the canning industry. It adds much to the knowledge of the medical profession and it includes poisoning of all kinds, many types of which are not known to have occurred in canning foods and are characteristic of other foods.

The point in all this work which concerns the canning industry most intimately is the determination of the thermal deathpoint of botulinus spores. This work has been carried on in Dr. Rosenau's laboratory. Dr. Dickson has given it much attention and Dr. Esty, the head bacteriologist of the research laboratory of the National Canners Association, has spent nine months working with Dr. Meyer on this subject, taking into Dr. Meyer's laboratory the experience of the research laboratory in working on the same problem with other bacteriological spores. In this work there is determined the time necessary at each of a number of temperatures to destroy the spores of all strains of botulinus which have been isolated. This work is then studied in connection with the work on heat penetration and on the hydrogen ion concentration of foods which is being conducted by the research laboratory and information has already been secured which will make it possible to advise processes before the beginning of the next canning season which will insure a product free from botulinus. Some of the processes which will be suggested will probably be more severe than is necessary. Further study will give us more exact information but the information is already at hand which will make it possible to suggest processes which will give a merchantable article and which will be safe.

NEWS ITEMS

The Chicago Dietetic Association has chosen the following officers for the year: president, Miss Anna E. Boller, Infant Welfare Society; vice president, Miss Ruth Chambers, St. Luke's Hospital; secretary, Miss Elizabeth Tuft, Wesley Memorial Hospital; and treasurer, Miss Clara Smith, Presbyterian Hospital.

The following chairman of standing committees have been appointed: publicity, Miss Rose Straka, Presbyterian Hospital; revision, Miss Mary Sedgewick, Washington Boulevard Hospital; membership, Miss C. Louise Yeomans, Cook County Hospital; publication, Miss Emma Aylward, Presbyterian Hospital.

This month marks the first anniversary of the *Bulletin* published by the Chicago association. New developments in this service are promised for its new year.

Miss Rose Straka is continuing her monthly bibliography and synopses of all articles dealing with food and nutrition which are published in current magazines.

THE NEWER PSYCHIATRIC VIEWPOINT

"There is a need of development of the means with which to broaden our psychiatric viewpoint," says the latest annual report of the trustees and superintendent of Butler Hospital, Providence, R. I.

"In medicine and the problems related to it, we have been through various periods, in each of which there was some predominant note; for example, in the early days mental diseases were supposedly connected with demoniacal possession, later with mysticism. From that we have evolved through the ages of blood disorders, toxemias and vague hereditary facts up to the present time when much of our attention is directed on the one hand to the endocrine glands and the vegetative nervous system; on the other to conflicts, repressions, regressions and unsuccessful sublimations.

"Is it not necessary at all times to aim at an all-round viewpoint? This, it seems to me, we should ever keep in mind. Although psychiatry belongs to the younger generation of the medical hierarchy, much progress has been made regarding etiology, scientific diagnosis, rational treatment and prognosis. There are cases, clear-cut, the etiology definite, the diagnosis thoroughly agreed upon, the treatment obvious and the outcome fairly well established; but in many cases we have need of more thorough investigation.

"First we must obtain an adequate painstaking history of our case, keeping clearly in mind that mental disorders —no matter what name we may give the psychosis or psychoneurosis—are really the individual's psycho-biological reaction to difficulties encountered. And it is only by a clear understanding of the mental and physical endowment of the individual, of his reaction to life in general, and especially from a knowledge of the particular difficulty which he has encountered—be it tumor of the brain or social maladjustment—that we shall be in a position to understand the individual's reaction to the situation and to institute intelligent measures toward the restoration of that patient to normal health. We have been far too apt in the past to give the condition a name without a clear understanding both of the patient and the difficulty.

"With this newer conception clearly in mind, we can continue our investigations. In many cases we must make a psychometric estimation of intelligence. We must be prepared to deal with the disordered psychological activities; we must conduct a careful physical examination, calling to our aid all the accepted procedures as to body metabolism and its variations."

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

NATURAL DIVISIONS OF HOSPITAL PURCHASING*

THE term purchasing, as herein used, applies alike to the expenditure for material and equipment for new hospitals and to the routine buying in established institutions. Although a certain class of articles is purchased only at the time of the erection of a new hospital, other commodities are replaced from time to time during the operation of an established hospital. Consequently, the suggested divisions of commodities are designed to apply either to the projected or the established hospital.

Probably no other field has so great a diversity of products that must be purchased. Every conceivable article used for the care and comfort of human beings, including scientific and clinical equipment and supplies, are included in the category of hospital requirements. Because of this extreme range in hospital purchasing, it is imperative to segregate the various commodities under certain groups for convenience and increased practicability in both budgeting and purchasing.

In the selection of those natural groupings under which every hospital purchase may be included, consideration must be given to a variety of factors. Accounting principles, as applied in the hospitals, must be given consideration in order to permit the separation of capital and maintenance expenditures, although this factor has but slight bearing, because such segregation can be best accomplished in the accounting department rather than in the purchasing division. The availability of departmental balances is another element that must be given consideration, but aside from these, other very definite and important factors must be weighed and judged. The generally accepted hospital conception of various commodities, the division of purchasing responsibility, the nature of the merchandise itself, whether the product is one of general use or of specialized manufacture for this particular field, trade customs and practices—all of these elements have a direct bearing on any arbitrary divisions of purchasing that may be established.

Yet such divisions, in the final analysis, must be arbitrary. There are so many borderline cases, instances where an article might be included in either of several sections with absolute justification that it is necessary to make arbitrary decisions. Consequently, even in the suggested divisions given below there will be found a certain overlapping and in some cases possible duplication, due to the nature of the merchandise or its uses.

In the projected hospital the suggested divisions permit a budget of probable costs to be computed through direct quotations or reference to purveyors of various commodities. Likewise these six natural divisions with the exception of the first section broadly represent groups of mercantile houses specializing in those products. Because of this fact contracts for the construction and equipment of the building can well follow these general definitions.

Likewise in the established hospitals these divisions permit of the ready classification of purchasing data, including quotations, catalogues, price cards, etc. The six divisions can also be taken as the basis of the annual budget, although it will be necessary to develop subdivisions of each of the six sections in order to facilitate accurate and intelligible budget figures.

In the more complex organizations found in the larger institutions, these divisions also represent the purchasing responsibility of various executives or groups and follow in the main the commonly accepted departmental arrangement of the institution. Because of these facts, the use of these divisions in purchasing likewise can be applied in delivery and storage, simplifying and systematizing the records and routine of these important departments.

SIX NATURAL DIVISIONS

These divisions have been adopted by the American Hospital Association in the planning of its annual exposition and in the assignment of special committees whose reports are presented at the annual conference:

Section I.
Special construction materials, building equipment and supplies.

Section II.
General furnishings, equipment and supplies.

Section III.
Clinical and scientific equipment, apparatus and supplies.

Section IV.
Laundry equipment and supplies.

Section V.
Food service equipment, utensils and supplies.

Section VI.
Foods and beverages.

*This preliminary article presents the results of a joint study of the subject by the executive secretary of the American Hospital Association and the staff of The Modern Hospital, a study which developed from editorial comments on the West Baden exposition.

The items included in Section I are, as a rule, covered by the so-called general contract in the building of a new hospital. In established institutions the engineers or maintenance department would cover the majority of the items. Included in this division are:

Building material, building specialties, flooring and wainscoting, screens, elevators, dumbwaiters and ash hoists, fire protection apparatus, heating and power equipment and supplies, lighting equipment and supplies, paints, varnishes and painters' supplies, plumbing equipment and supplies, signal and intercommunicating systems, ventilating and air conditioning apparatus and devices, waste disposal systems and devices, water purification systems, equipment and supplies used on hospital grounds and gardens.

As will be noted, this includes not only the building itself, but what is known as fixed equipment. Many architects include laundry equipment, sterilizing apparatus and the heavier kitchen equipment and refrigerating machinery in the heading of fixed equipment and as part of the general contract. Because of the specialized nature of such equipment, we have placed sterilizing apparatus under clinical equipment, laundry equipment in its proper section, and kitchen equipment, including refrigerating machinery, under the heading of food service equipment. As a rule hydrotherapy equipment is part of the plumbing contract, but because of its specialized nature, this has been placed under clinical equipment.

These are examples of natural conflicts that will arise from any arbitrary divisions, but which we have attempted to solve by placing disputed items under the more specialized headings, not only because of the purchasing routine for such equipment, but because such equipment is largely furnished by manufacturers and dealers specializing in the merchandise covered by the respective sections.

A distinction has likewise been drawn between floorings and floor coverings. Floorings refer to permanent types of flooring materials, such as the various composition and mastic floorings, tile, slate, and other floorings which are part of the original building. Floor coverings whether permanently fastened to the floor or removable are included in Section II. This distinction has been made largely because merchandising customs place such floor coverings as linoleums in the same category as rugs, rather than among permanent floorings such as tile and similar products. Likewise while operating room lights are a part of the general lighting system, they are specially included under clinical equipment because those concerns doing the largest business in this specialized lighting are concerns which specialize in clinical equipment and supplies.

Section II includes:

Furniture, wood and metal, (not including so-called steel hospital furniture), floor coverings, such as carpets, rugs and linoleums, curtains, shades, awnings, linens (bed and table) blankets, spreads and towels, beds, mattresses, pillows, dry goods, uniforms and other garments, office equipment, record forms, office supplies, soaps and general cleansers, cleaning equipment and janitors' supplies, paper goods, toilet supplies, disinfectants, etc.

In the equipment of the new hospital this might be termed the "department store" group as it includes those furnishings which are generally handled by the contract department of such stores. In the established hospital these products are, as a rule, included in the housekeeping department. Because of its specialized nature, steel hospital furniture has been put under the head of clinical equipment. For example a steel bedside table might be considered a part of general furnishings, yet this same table also might be employed as an instrument or anesthetists' table. In this section also are included those soaps and general cleansers employed about the institution either by the cleaning force or for toilet purposes. Soaps specially designed for laundry purposes belong under the heading of laundry soaps. Some may take issue with the inclusion of disinfectants under this heading, assuming that this would be included under drugs and pharmaceuticals.

The section devoted to clinical and scientific apparatus and supplies would probably be subdivided in the established hospital under more specialized groups such as surgical equipment, nursing supplies, pharmacy supplies, laboratory, x-ray, etc. Such subdivisions are natural and are thoroughly logical. The general heading, however, of clinical and scientific equipment, apparatus and supplies including steel hospital furniture, surgical and scientific instruments, medical, surgical and nursing supplies, sterilizing equipment, therapeutic equipment, laboratory and x-ray equipment and supplies, drugs and pharmaceuticals, ambulances, represents a distinct and separate class of merchandise both in source of supply and use in the institution.

Laundry equipment and supplies comprise the fourth division suggested and this includes not only all equipment used for washing, drying and ironing, but water softening devices, marking equipment, disinfectors and sterilizers for mattresses and bedding supplies, together with the wide range of acids, soaps, alkalis and such supplies used in laundry operations. The laundry department in the hospital is so distinct that the segregation of these items is natural.

Under food service equipment, utensils and supplies are included not only the heavy equipment in the kitchen such as ranges, steam tables, cookers, etc., but the labor-saving devices, such as power mixers and other machines, and the wide range of utensils and cutlery and other commodities essential to the preparation and service of food. Refrigerating machinery, storage equipment including special bins, shelving and drawers for food storage, tray wagons, food carts and similar equipment used in transporting and serving foods, together with dish washing equipment, form a natural part of this section.

Probably the only exception that can be drawn would be the fact that table linens, including both table cloths, napkins, tray covers and similar articles, together with paper substitutes are included under Section II rather than under Section V.

Foods and beverages form an obvious division, including all food products used in the institution, together with staple beverages such as coffee, tea and cocoa, and also those special beverages frequently employed in the care of the sick. Naturally the products in this section have no part in the planning of the new institution, but on the other hand form the principal item of expense, outside of wages, in the established hospital. In many institutions Sections V and VI are included under a single heading of dietary department. Kitchen equipment and utensils, however, form such a distinct group, both as regards source of supply and methods of purchasing, that it was thought best to separate food service equipment from foods. A further factor in this decision is the fact that Section V forms a considerable item in the cost of a new hospital, while foods are solely a problem of the established institution.

Naturally it is not to be expected that every hospital will find that the six suggested divisions will meet its established system; nevertheless, it is believed that it will be well worth the while of every hospital executive to plan both original and routine purchasing along these lines, because of the obvious convenience and efficiency in purchasing that will result.

HOSPITAL SCREENING

By E. M. BLUESTONE, M.D., and JOSEPH TURNER, M.D., Assistant Director, Mount Sinai Hospital, New York.

THE problem of screening as applied to hospitals depends for its solution on many factors of which the most important is the extent of local sanitation in the hospital area. In certain geographic locations, especially in the tropics, hospital authorities are under a moral obligation to protect the community from the spread of diseases which are carried by the numerous disease-bearing insects. The value of screening in such locations has been amply demonstrated. In the Panama Zone the results of screening were dramatic and made the building of the Canal possible. The screening of cases of yellow fever in that region explains the interesting fact that there have been no more cases of this disease since the year 1906. With the growth of the sanitary idea, and the consequent prevention of the breeding and multiplication of insects, we may expect a corresponding decrease in the urgency and complexity of our problem. In preventive medicine the idea of the screen holds first place. The whimsical remark of Jonathan Swift reminds us that the insect carrier may stay with us (and therefore the screen) as long as big bugs have little bugs upon their backs to bite 'em.

The importance of screening hospitals is of sufficient moment in other than tropical locations to warrant consideration by hospital superintendents here. The discovery of Theobald Smith that the insect as well as the higher animal serves as a true host of the pathogenic organisms which cause disease has increased our interest in the question of screens, for we must now guard against more than the passing discomfort which is brought by these winged pests. We find ourselves obliged to protect the sick and the well against disease-carrying insects. The carrier must either be destroyed or isolated. We might in this connection paraphrase the remark of Chantemesse by saying that a hospital should think it as much of a discredit to have flies at the bedside as bugs in the bed.

Flies Are Disease Carriers

Flies have been proved to carry the germs of typhoid fever, cholera, dysentery, and other diseases, and must therefore be denied access to the source of these bacteria if our sanitary chain is to be regarded as complete. A few, like Chapin, believe that "there is no evidence that the house fly is a factor of great moment in the dissemination of disease" but it is fair to assume, in the presence of overwhelming evidence, that the fly is a guilty party. The mosquito is no less important as a carrier of filth, disease and discomfort, and creates a more difficult mechanical problem for the hospital superintendent. Classic examples are malaria and yellow fever. Both of these diseases could be eliminated if (1) the breeding place of the stegomyia and the anopheles could be abolished, or (2) if human beings could successfully screen themselves against attack. We must take into consideration in this discussion the distance that a mosquito can fly. Thus, the anopheles will fly only 100 yards except when borne by the wind, and the culex, which is responsible for so much of our discomfort, can fly 20 miles. The nearness of potential breeding places is therefore a factor.

The screening of a hospital depends in a large measure on the sanitary habits of its neighbors as well as of its employes. To be of full value as a defense against flies, moths and mosquitoes, the screen should be kept in place, and in this regard the cooperation of all elements in the hospital is essential. The patient, doctor, nurse, attendant and casual visitor must see to it that the screen is not moved from its assigned place. To many the screen appears to be a mechanical barrier to proper natural ventilation, and here lies a real danger. The screen is often pushed out or removed altogether "to admit the air"; hospital employes, in kitchens especially, have even been known wilfully to destroy screens in order "to get more air"; and the chain of openings in the hospital buildings is not very much stronger than its weakest link. Rosenau wisely remarks that a screened house is safe only to careful and intelligent people. It might be explained to those who do not grasp the significance of the screen that its function in a manner resembles that of an asbestos curtain in a theater, and that it is a mechanical barrier to the spread of disease.

Screen Where Material Invites Insects

The minimum requirement is that screens be placed with an eye to local and general sanitary conditions, and according to the distribution of insect-inviting material. Kitchens come first in the matter of screening and hardly less important are lavatories, dining rooms, wards, operating rooms and laundry. These should be protected as the first places that are likely to attract insects. Other open spaces require insect-tight devices, depending on local conditions. The multi-storied hospital which is coming into vogue may not require screening in its upper stories but here again local conditions will have to be the guide. In Cleveland recently it was said that the upper stories of the new nine-story City Hospital building would not have to be screened, but a guest at a local hotel reported the observation of hosts of mosquitoes under the eaves of the 12-story Statler Hotel.

It is hardly necessary to say that the screening of a hospital should be considered as part of the general esthetic problem in planning the general architecture of the building. Local structural conditions vary the type of the screen, depending on the location and contour of the opening to be screened. Wherever possible the screening of the future hospital should be planned for in the office of the architect.

Screens Should Be Insect Proof

Generally speaking a good screen should possess the following qualifications:

1. It should be insect-proof within reasonable limits. This is accomplished by a screen frame which fits snugly into the window opening, and by a wire cloth the mesh of which is fine enough to exclude the local species of insect. For general uses Craig recommends a minimum of 11 meshes to 2 cms. Wood prescribes a No. 16 mesh for the anopheles and Rosenau has proven the necessity for a No. 18 mesh as a protection against the stegomyia. Against some insects, notably the flea which carries the bubonic plague and the louse which carries typhus, our only protection—besides the destruction of the insect—is the individual body screen which is provided by clean clothing. There are other accessory methods of keeping insects at a distance, but these will readily suggest themselves to any one who has had more than one encounter with them. In this connection it might be added that with the increase in the number of wires to the inch there is a corresponding decrease in the ventilating area. For this reason there should be no more wires than are necessary for the protec-

tion which we seek. The usual variety of copperbronze wire cloth offers a minimum objection to ventilation or to a view of the outside. A word of caution should be added against the painting of copper screens as this procedure is first of all unnecessary, and secondly, because the film of paint decreases the ventilating area by its thickness. More ventilating area is obtained by the use of the metal screen which has a narrower frame than those built of wood.

2. Screens should be weather-proof. The wire cloth should always be rust-proof, and the metal should preferably be copper-bronze or monel. Both of these forms of metal are comparatively more expensive than the ordinary iron wire which requires enameling, galvanizing or painting. Because of this treatment these iron screens present familiar drawbacks. The latter type of screen cloth is cheap only because of its initial low cost and its use is justified for temporary purposes only, or where the screen is known to be subject to such damage as will require frequent replacement. Unpainted screen frames, if constructed of iron, are liable to rust and, if constructed of wood, are liable to rot. To permit the drainage of rain water, which tends to accumulate on the window sill inside of the screen, it is wise to cut grooves in the most dependent part of the screen.

Must Consider Cost of Upkeep

3. The screen should be so constructed as to be purchased and maintained economically. It is important to bear in mind in figuring the cost of screening a hospital: (1) the initial cost, (2) the cost of removing and storing screens which are of the removable type, and the cost of incidental breakage, (3) the amount of storage space required for the removable type of screen, (4) the cost of upkeep, rewiring, etc., (5) the cost of maintaining an adequate system of screen inspection, (6) the cost of keeping screens clean.

Even financial expediency hardly justifies the purchase of a cheap screen where the initial saving is soon lost in the cost of successive repairs. A screen is liable to damage in many ways. Wide gaps may be created in the screens by the wanton use of a pencil. Screens may be torn by accident, and in time may be expected to wear out and should therefore be easily rewired. There are very few screens made today which have to be sent to the factory for rewiring, and in most instances rewiring is readily accomplished in the hospital repair shop.

Some hospitals make it a practice to take screens down in the fall, store them over the winter, and return them to their proper places in the spring. The temporary type of screen for this reason requires the time of a certain number of employes in the handling, besides the amount of space which is required for their storage. The screen under these circumstances requires some method of identification, a detail which is easily arranged for and must be borne in mind. The handling, transportation and storage of screens subject them to the risk of considerable damage. Permanent screens which are left in place throughout the year are obviously not subject to damage from these causes. Incidentally such permanent screens often serve as a wind-break in stormy weather. The cost of removing and storing screens every season should be kept in mind when considering the initial high cost of the disappearing and permanent type of screen as compared with the removable and temporary type.

Should Not Interfere With Hangings

4. Screens should not interfere with the hanging of awnings on the outside of the window, with curtains or other draperies on the inside, or with flower boxes on the window sill. In a consideration of the subject of screens these details are often overlooked. The placing of the screen hardware is important. Thus a screen hinged on either side that opens outward interferes with the operation of awnings and with flower boxes. Screens that are hinged at the top or side and open in interfere with the operation of shades and curtains unless it is possible or desirable to hang these on the screens proper. Such screens interfere with window draperies in any event and do not permit the free use of interior flower boxes where these are desired. Screens hinged at the top and opening outward at the bottom permit the hanging of awnings but the manipulation of the awning ropes is awkward if not impossible.

5. Screens should not interfere with the washing of windows. The disappearing, roll-up, or double-hung sliding screen offers no obstacle to the washing of windows. This point does not arise in the case of windows that are hinged on the side and open in. Where the screen is placed on the outside, any type of hinged screen will permit window washing. Single screens which are hooked at the top but not hinged have a tendency to work loose and fall when pushed outward. It is difficult to keep windows clean where screens are hung on the outside, especially during a driving rain storm when water forced through the screen spatters dirt on the window pane.

Should Protect Where Impact Comes

6. Screens should be protected in places where they are subject to damage by impact. This applies especially to screen doors and to the lower screen sections of inclosed porches where there is no solid rail or balustrade. Protection in these cases is secured by the use of grilles of various designs, push plates, kick plates and similar mechanical contrivances.

7. Screens should be built to fit the window opening accurately. A hospital recently inspected was "fully screened," but almost everywhere there was a gap of from one to two inches between the screen frame and the brick wall which framed the window opening.

8. Screens should be workable under all conditions If of the sliding variety screens should move freely in both directions during all kinds of weather or, if hinged, they should fit snugly but not stick in their rabbetted grooves. Metal screens are less subject to this danger from atmospheric conditions and are not likely to warp, swell or stick as happens so often with the wooden type of frame.

The growth of interest in the screen as a sanitary device has brought with it a corresponding increase in the screen-making industry. Screens of every description are on the market and each model, as is usual in such cases, has its advantages and disadvantages. Generally speaking, it is not difficult to choose an efficient screen where financial embarrassment does not influence the decision Most screens under present hospital conditions must be purchased at a minimum of expense and for this reason wooden screens are still in the majority. Good screens can be made of wood if proper care is given to their manufacture. Thus, the kind of wood that is used is important. White pine is generally considered best for this purpose, as it has the additional quality of readily absorbing wood preservatives used in painting and staining. Other kinds of wood may of course be used, the commoner varieties being cypress, ash, and oak. Experience has proved the necessity of using wood that is air-seasoned or kiln-dried. Wooden screens have a tendency to shrink or swell under adverse weather conditions and there is also a tendency to bind or warp. Unpainted wood tends to rot

after comparatively brief use. The breaking of corners may be minimized by proper attention to the joints.

Various Models of Screens

Screen models may be divided into four groups:

1. There is a ready-made screen on the market which has a wood or metal frame and which comes in two styles. One of these is a sliding double screen which is pulled apart horizontally to fill the window opening beneath the sash. The other is a single screen, almost the full width of the window opening, with spring ends which open and fit into the sash grooves. Both of these types are cheaply made and are not durable. They can only be used under one sash. They do not fit tightly and as a rule are not entirely insect-proof. These screens are justified for temporary use only.

2. The second type is a made-to-measure single screen covering one opening of a double hung sash. This model slides up and down in grooves or on a rail. It will permit the screening of either sash opening, the screen moving into place to the open section. It does not permit both sashes to be open at the top and bottom simultaneously and is insect-tight only on three sides.

3. The third is a made-to-measure double sliding screen which is similar in construction to the double-hung window, except that the screen instead of being hung on weights slides up and down in a groove or on a track. This type of screen can be made insect-tight and offers none of the objections mentioned above. It does not interfere with the washing of windows, with the hanging of awnings or draperies, and is generally desirable as an efficient screen which is economically installed and maintained. Another modification of this screen is one in which the screen disappears out of sight in a metal built-in recess above the window opening. The entire window opening in this model may be utilized for ventilation because the window also disappears into this recess.

4. The fourth type is a made-to-measure single screen covering the entire window opening. It may be hinged to open in or out from the side or top, or may be hung from the top on hooks. It interferes with the hanging of awnings and draperies, with flower boxes and with the washing of windows. A single screen covering the entire opening and which does away with these objections is the newly brought-out roller screen which operates in the same manner as the roller shade. When not in use the screen rolls up and disappears into a metal box at the top of the window. Sufficient tightness at the sides is secured by running the selvaged edges of the screen in metal grooves. It has not been possible thus far to make the screen wire cloth as tight in this roller screen as in the less flexible types.

We have attempted in this brief discussion to lay down what we consider the general principles involved in the screening of hospitals. The application of these principles depends upon the local conditions in which the hospital operates. The problem is not a difficult one. There are many screens on the market. The question is which to choose? To screen a hospital successfully there is required adequate equipment to begin with, and rigid discipline forever afterward.

PLANNING EQUIPMENT OF A HOSPITAL LAUNDRY

By WALTER T. WILLIAMS, Cincinnati, Ohio.

IN PLANNING the equipment of a hospital laundry one should make ample provision for taking care of all of the work that is to be done, and it may be well to have a little excess capacity for emergencies, but at the same time one should be very careful that in providing excess capacity he does not go beyond reasonable bounds. Neither should one go to the other extreme, and in a mistaken spirit of economy under-equip the plant, and thus cause it always to be in an overloaded condition and therefore working under a handicap.

Manufacturers of laundry machinery estimate the capacity of a machine by the number of pounds of goods it will handle in a given time; but, as a rule, goods are not weighed in a hospital laundry, and if any account is kept at all it is only as to the number of pieces handled. Thus, with the machinery man figuring in pounds and with the hospital laundry superintendent figuring in pieces, we have two different units of measurement to bring together when we try to make an estimate of the machinery that a hospital laundry will need.

The manufacturers' unit of measurement, pounds of goods, is a definite one, but the hospital's unit of measurement, pieces of goods, is not, for a "piece" may be a napkin which weighs but a small fraction of a pound or it

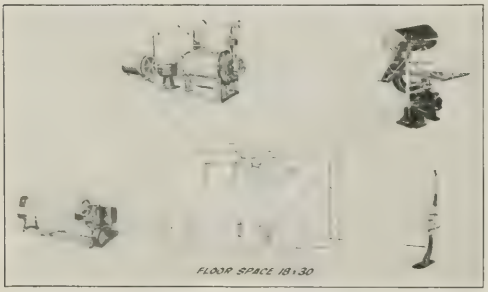


Fig. 1.
Laundry for fifty bed hospital, using ten pieces per bed per day. Floor space, 18'x30'. The equipment consists of one 36"x48" washer, wood; one 26" underdriven extractor; one 30"x42" drying tumbler; one group drive, consisting of motor and transmission, to drive these three machines; one 100" flat work ironer; one No. 38 press; one ironing board.

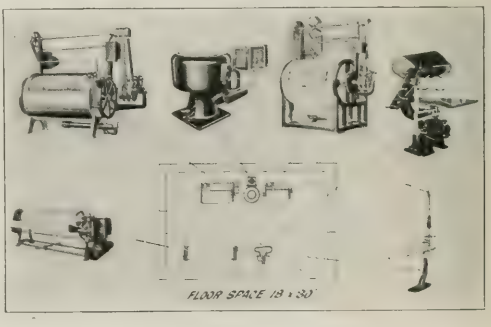


Fig. 2.
Laundry for fifty bed hospital, using ten pieces per bed per day. Floor space, 18'x30'. Each machine has a motor attached, and the equipment consists of one 36"x33" solid head washer, brass case and cylinder; one 26" underdriven extractor; one 30"x42" Junior drying tumbler; one 100" flat work ironer; one No. 38 press; one ironing board.

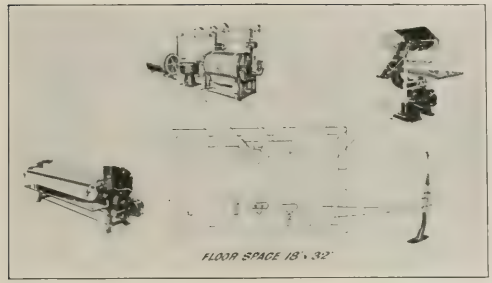


Fig. 3.

Laundry for fifty bed hospital, using fifteen pieces per bed per day. Floor space, 18'x32'. The equipment consists of one 36"x54" washer, wood; one 26" underdriven extractor; one 30"x42" drying tumbler; one group drive consisting of motor and transmission to drive these three machines; one 100" No. 41210 return apron flat work ironer; one No. 38 press; one No. 51 press; two ironing boards.

may be a sheet which weighs a pound and a half.

Even when we classify the pieces and count them it does not give an accurate basis from which to figure. For instance, some sheets may weigh twice as much as others, and it may be the same in case of napkins, towels and other articles, either because of difference in size or on account of varying weight or thickness of the goods. Hence, the best that can be done, as things now stand, is to base estimates of required equipment for a hypothetical plant on average conditions and weights.

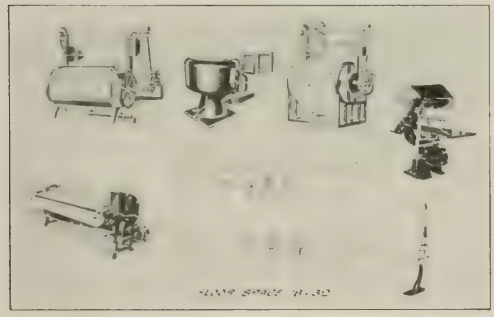


Fig. 4.

Laundry for fifty-bed hospital, using fifteen pieces per bed per day. Floor space, 18'x32'. Each machine has a motor attached, and the equipment consists of one 36"x54" solid head washer, brass case and cylinder; one 26" underdriven extractor; one 30"x42" drying tumbler; one 100" No. 41210 return apron flat work ironer; one No. 38 press; one No. 51 press; two ironing boards.

At the 1922 convention of the American Hospital Association, the American Laundry Machinery Company displayed floor plans for hypothetical laundries for hospitals, together with lists and pictures of machinery for the equipment of the respective plants, of which there were twelve. Through the courtesy of the company we are reproducing those plans herewith. They are, of course, hypothetical, meant to portray ideal installations rather than actual cases. Local conditions will make it necessary to alter machinery requirements to fit the situation.

It is assumed that in each case the hospital will make provision for a suitable location for its laundry, a place well lighted, amply ventilated, near the source of steam supply and with reasonable convenience and accessibility. It is also assumed that provision will be made for water supply and such other incidentals as may be necessary.

There are four suggestions, or tentative plans, for laundries for fifty-bed hospitals, two of these being for a hospital that uses ten pieces per bed per day and two being for a hospital that uses fifteen. The first of these plans is shown in Fig. 1, the list of machinery being under it. This is for a fifty-bed hospital, using ten pieces per bed per day. The second plan, shown in Fig. 2, is for a laundry of the same capacity, but with more expensive equipment. Because of limited funds, it may be good policy for a hospital to install the cheaper plant, but where the money is available the more expensive plant is the better to buy, because it will last longer and be more efficient.

The principal difference in the two plants rests in the fact that one has a washing machine with cylinder and

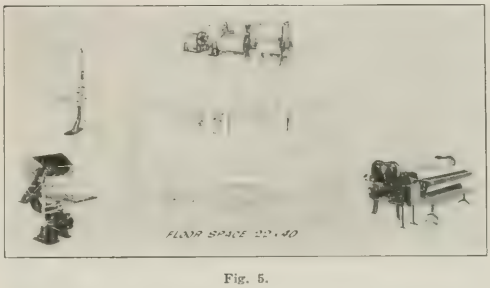


Fig. 5.

Laundry for 100 bed hospital, using ten pieces per bed per day. Floor space, 22'x40'. The equipment consists of two washers, wood, 36"x 54" and 30"x30"; one 26" underdriven extractor; one 30"x42" drying tumbler; one group drive for these four machines; one 100" two-roll return apron flat work ironer; one No. 38 and one No. 51 press; two ironing boards.

shell made of wood, while the other is made entirely of metal. The metal washer will last much longer than the one of wood, and therefore is the more economical to buy. Besides this, the metal washer is much more easily cleaned than the wood one, and hence more apt to be in a sanitary condition.

The cost of the installation shown in Fig. 1 also is reduced by having a group drive for the washer, extractor and drying tumbler, instead of having individual motor drive, as shown in Fig. 2. The washer shown in Fig. 2 is made of metal.

It may be well to explain that the frequently-used term,

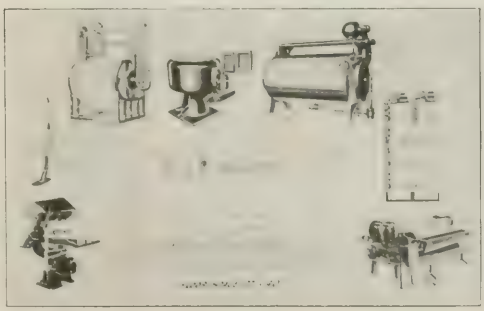


Fig. 6.

Laundry for 100 bed hospital, using ten pieces per bed per day. Floor space 22'x40'. Washers have panel control and machines have individual motors. The equipment consists of two solid head washers, brass case and cylinder, 32"x54" and 28"x38"; one 26" underdriven extractor; one panel control board; one 30"x42" drying tumbler;; one 100" two-roll return apron flat work ironer; one No. 38 and one No. 51 press; two ironing boards.

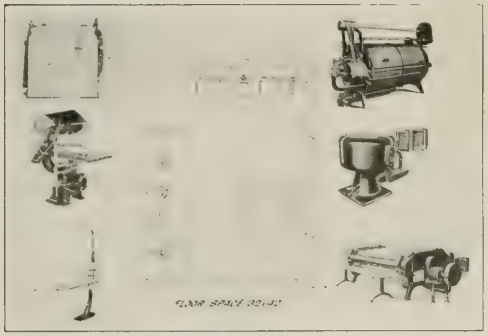


Fig. 7.
Laundry for 100 bed hospital, using fifteen pieces per bed per day. Floor space, 32'x42'. Machines have individual motors. The equipment consists of two washers, wood, 40"x64" and 36"x36"; one 30" underdriven extractor; one 40"x64" drying tumbler; one 100" No. 3115 five-roll flat work ironer; three presses, Nos. 25, 38 and 51; two ironing boards.

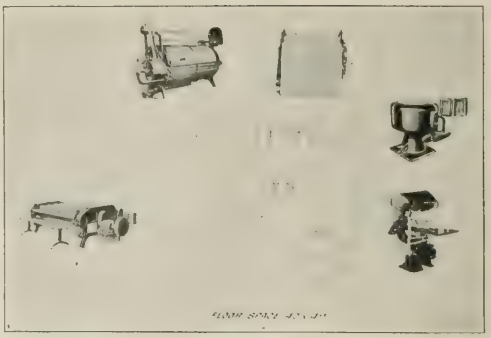


Fig. 9.
Laundry for 200 bed hospital, using ten pieces per bed per day. Floor space, 42'x42'. Machines have individual motors. The equipment consists of three washers, wood, two 36"x64" and one 36"x36"; two 26" underdriven extractors; one 100" No. 3115 five-roll flat work ironer; one 40"x64" drying tumbler; four presses, Nos. 25, 38, 35 and 51; one ironing table.

"metal washer," is not a very definite one. The cheaper metal washers are made of galvanized iron and the more expensive ones are made of brass, bronze or monel metal, a natural nickel alloy. Each of these will last longer than a wood washer, but under certain conditions a brass or bronze washer will last much longer than a galvanized iron machine while the monel metal washer will outlast them all.

It has been stated that where hard water is used the metal of a galvanized washer is protected by a coating of lime and magnesia soap which forms on it and prevents corrosion. When zero water is used, this coating does not form, and thus certain chemical reactions result. This should not be taken as an argument against zero water; it is rather an argument in favor of the brass, bronze or monel metal machine, which are not affected by water conditions.

Figs. 3 and 4 give plans for a laundry for a fifty-bed hospital that uses fifteen pieces per bed per day. This equipment is similar to that of the first two plants, with the same choice in the matter of washers and drives. All of these plants occupy approximately the same floor space.

Fig. 8.
Laundry for 100 bed hospital, using fifteen pieces per bed per day. Floor space, 36"x44". Panel control and individual motors. The equipment consists of two washers, monel metal, 36"x64" and 36"x 36"; one 30" special deep underdriven extractor; one 24" starch extractor; one 40"x64" drying tumbler; one panel control board; one 100" No. 3115 five-roll flat work ironer; three presses, Nos. 25, 38 and 51; two ironing boards.

Figs. 5 and 6 give plans for a laundry for a 100-bed hospital, using ten pieces per bed per day. Figs. 7 and 8 give plans for a laundry for a hospital of the same size, but using fifteen pieces per bed per day. It will be noted that the two latter plants require but little more floor space than the two former, although the capacity of the latter plants is 50 per cent greater than that of the others.

In these plans we encounter the Prim Press, a late type of steam pressing machine, which almost eliminates hand ironing. In some plans is shown a panel control board, which reverses the motors on the washing machines; and in some plans we also find overdriven extractors very efficient and sturdy machines with a large capacity.

Figs. 9 and 10 show plans for a laundry for a 200-bed hospital, using ten pieces per bed per day. Figs. 11 and 12 give plans for a laundry for a hospital of the same size, but using fifteen pieces per bed per day. The four Prim Presses specified for each of these plants really are joined together in a manner that converts them into one compact unit, operated by two women, who are assisted by one or more hand ironers. The function of the hand ironer is to retouch those articles that require it and to fold the articles ironed on the presses.

In the plans shown in Figs. 11 and 12 a cylindrical

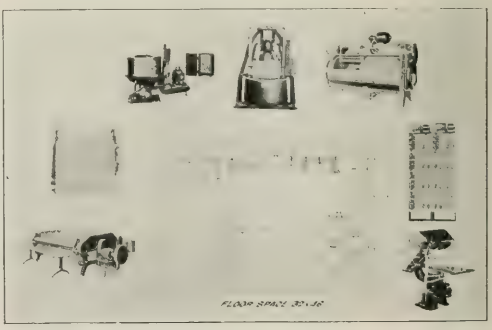


Fig. 10.
Laundry for 200 bed hospital, using ten pieces per bed per day. Floor space, 32'x46'. Panel control and individual motors. The equipment consists of two washers, monel metal, 42"x72" and 36"x36"; one 40" extractor, overdriven; one panel control board; one 40"x64" drying tumbler; one 100" No. 3115 five-roll flat work ironer; four presses, Nos. 25, 38, 35 and 51; one ironing table.

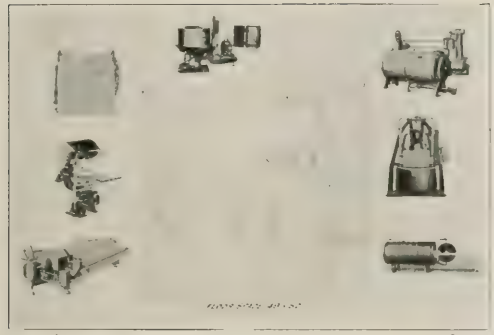


Fig. 11.
Laundry for 200 bed hospital, using fifteen pieces per bed per day. Floor space, 48'x52'. Machines have individual motors. The equipment consists of three washers, wood, two 40"x72" and one 36"x36"; one 48" extractor, overdriven; one 24" starch extractor; one 40"x64" drying tumbler; one 30"x86" cylindrical disinfector; one 100" No. 31140 four-roll extra flat work ironer; four presses, Nos. 25, 38, 35 and 51; one ironing table.

disinfector is specified, but unless contagious cases are received in the hospital this apparatus is not an absolute necessity. It is a great convenience, however, even where contagious cases are not accepted, for the device affords a means of disinfecting articles without washing them, such as mattresses, pillows, etc. Where goods come from contagious wards the articles are loaded into the disinfector from a separate room, and after the load is disinfected the pieces are discharged into the washroom. One type of sterilizer washes the goods, receiving the load from an outside room.

The plans shown include equipment for finishing all of the laundry work of the personnel, with the exception of collars. However, such additional equipment as this work would require may be added if it is found desirable to do so. It should be remembered that while these plans are based on careful investigations and broad experience, they only apply to average conditions, and therefore in exceptional cases modification will be necessary.

The starch extractor specified in some of the larger plants may be eliminated if cold starch is used in the final bath in the washer. The greater the capacity of the laundry the larger will be the cost of most of the machines. This is offset by the fact that where there is volume to keep them busy the more efficient machines more than pay for the increased expense through reducing the pay roll percentage.

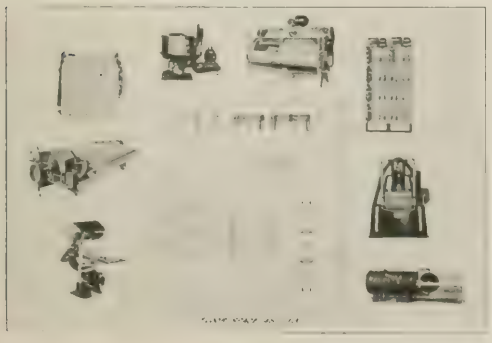


Fig. 12.
Laundry for 200 bed hospital, using fifteen pieces per bed per day. Floor space, 45'x48'. Panel control and individual motors. The equipment consists of two washers, monel metal, 42"x84" and 36"x 54"; one 48" extractor, overdriven; one 24" starch extractor; one 40"x64" drying tumbler; one panel control board; one 30"x86" cylindrical disinfector; one 100" No. 31140 four-roll extra flat work ironer; four presses, Nos. 25, 38, 35 and 51; one ironing table.

A MECHANICAL ETHER DROPPER

The administration of ether for anesthesia presents many difficulties and has been the subject of considerable study and research. The so-called open method is the more generally used, both because of its greater simplicity as well as recognized clinical advantages.

The use of a mechanical dropper is recommended, insuring as it does a perfectly smooth, even drop. Various ether droppers have been made for this purpose, but have proved only partially satisfactory. A recently devised piece of apparatus, however, seems to meet surgical requirements in every way. With this dropper narcosis can be produced without any excitement stage. The pulse and respiration remain good, the color of the patient is excellent, and the postoperative blood pressure in many cases exceeds the preoperative pressure.

Mechanical ether dropper attached to operating table

The apparatus is very simple, but is efficient when properly handled. It consists of a transparent glass cup through which runs a needle valve that regulates the drop. The cup holds one 4 ounce can of ether. This cup is suspended on a flexible arm which is fastened to a clamp, and can be attached to any operating room table with ease. The flexible arm allows the cup to be placed at any desired angle.

Some advantages of this apparatus are: it is easy to manipulate; it gives an even, steady drop on one place of the cone; it allows perfect oxygenation with smooth anesthesia; induction is readily and easily produced with it; it leaves one hand free so that the anesthetist may attend his patient with ease, and it can readily be attached to any operating table.

Genuine good taste consists in saying much in few words, in choosing among our thoughts, in having order and arrangement in what we say, and in speaking with composure.—Fenelon.

WHAT ABOUT ELECTRIC STERILIZERS FOR THE HOSPITAL?

By WEEDEN B. UNDERWOOD, Electrical Engineer, Rochester, N. Y.

ONLY a few years ago the idea of heating a battery of sterilizers by electricity and pleasing everyone concerned, even the man who paid the bills, was in the same category as the idea of flying in a heavier-than-air machine. But we have the flying machines and they have met a certain demand perfectly. Similarly we have the electric sterilizers and when used under the right conditions, they serve most effectively.

It has taken a good deal of experimental work and some of the earlier outfits were perhaps crude and complicated, but splendid progress has been made. Electrically heated sterilizers are now available, thoroughly practicable in every sense.

The fact is not generally appreciated that there are many institutions where electrically heated sterilizers should be used, where they may be used with greater satisfaction and even at less expense than if heated by either gas or steam. In making this broad statement it is assumed that high grade, scientifically developed apparatus is being considered.

Careful Investigation First

It is not intended to infer that all small hospitals should use electricity, but the average hospital of fifty beds or less, or possibly greater capacity, should consider electricity when it plans this branch of its equipment. It is a fact demonstrated in many hospitals all over the country that under certain conditions electricity meets the requirements better than anything else. The decision to use electric sterilizers, however, should be made only after careful investigation. Over-enthusiasm on the subject may cause unwarranted expense, such for example as the idea of producing electric power from steam in the institution's power plant, to heat sterilizers.

No exact rule can be formulated but the following paragraphs will help in a preliminary way to determine what method of heating is best adapted to given conditions.

If the hospital is large enough to maintain a power plant and has other use for pressure steam (40 to 60 lbs.) all the year round, the problem is simple. This hospital should use steam for sterilizing; it can ill afford to use anything else, for steam equipment wears well, steam heat is much more rapid than any other method and it has the great advantage that no part of any sterilizer so equipped will be injured if the operator should operate the sterilizer dry.

Steam for Sterilizers Only Is a Luxury

But installing a steam plant for the sole purpose of heating the sterilizers usually is an expensive luxury. Any high pressure boiler should be handled only by a licensed engineer whose salary alone would be several times the cost of the electric power required for the sterilizers, even at a high rate. It also would cover any probable expense in repairs to the heating equipment. Then, too, electricity is ready for use at any time and it would not be practicable to keep up steam in the boiler more than for a few hours each day. During the remainder of the day the sterilizers are out of commission. The first cost of a battery of electrically heated sterilizers completely installed would be a good deal less than the cost of the same sterilizers steam-heated, including the boiler and accessories.

Gas-heated sterilizers are in general use and usually they function very well, but they have certain marked disadvantages. They are always more or less dirty, they keep the sterilizing room intensely hot and the air vitiated. In close quarters they are always objectionable as they detract from the ideal sanitary condition so essential in surgery. But if the nurse permits the water to evaporate or drain out when the gas is lighted, the entire sterilizer may be ruined in a few moments; certainly expensive repairs will have to be made involving delay and the sterilizer after one burnout will never look right again. Repeated burnouts will surely necessitate replacement.

Electricity has advantages over steam or gas in that it is perfectly clean and cooler. Most of the objectionable features of gas are entirely eliminated and it does its work more quickly. If you turn on gas in an empty sterilizer, you burn up the sterilizer. If you turn on the electricity in an empty sterilizer, you burn up a heater and injure your sterilizer not at all. You can replace the heater at comparatively small expense with no serious delay. All of the units on a well designed outfit are exactly alike and one or two spares may be carried in stock for emergency. Very small sterilizers are made with automatic devices which effectually prevent burnout, but such equipment applied to a large sterilizer would be much too complicated to be practical.

In deciding between gas and electricity, the first consideration should be: "Are both supplies dependable and which is more dependable?" In many towns the gas supply occasionally gives out or gets so weak that it is impossible to use it successfully at certain periods of the year. If this condition exists or is liable to exist, it will be unwise to equip for gas heating. Similarly some sources of electric power are not reliable, but this condition owing to constantly improving apparatus is becoming rare.

Should Compare Cost and Upkeep

If both gas and electricity are available dependably and at fair rates, one must weigh the advantages of electricity over gas and consider the first cost and the cost of operation and upkeep.

The first cost of the electric outfit installed will be possibly 10 to 20 per cent higher than for a similar gas outfit and the cost of operation will usually be 25 to 50 per cent higher for electricity than gas. With careful handling the upkeep should be about the same for either method. This estimate would seem to indicate that electricity is too expensive to be considered, but one must remember the features of cleanliness, actual and apparent, the greater speed in working and the fact that burnouts will leave the electric sterilizer unharmed while burnouts will ruin the gas sterilizer.

The actual cost of running an electric sterilizer may be accurately predetermined from test data. Of course such figures can not take into consideration careless work or needless use of power; they would be based upon the exact requirements for sterilization under specified conditions, such as the use of filling water at a given temperature and starting with a certain quantity of water. The watt-hour consumption of power can be closely estimated per sterilization for each type of sterilizer. By estimating

the number of times each sterilizer will be used per month, the total power consumption can be shown. For example, a certain hospital of forty beds capacity estimates that one month's work will be about as follows:

Instrument sterilizer, in use 75 times.
Utensil sterilizer, in use 50 times.
One tank of water sterilizer, in use 30 times.
Dressing sterilizer, in use 30 times.

For this amount of use and assuming that the sterilizers will be filled with water at 150 degrees F., the total power consumption would be 460 K.W. hours and at an average rate of 3c, the bill for the month would be $13.80.

Should Consult Local Power Company

If a hospital anticipates the purchase of electrically heated sterilizers it will do well to submit all details of requirements to some reliable manufacturer and obtain from him specifications covering the electric power and piping requirements. This data should be taken up with the local power company to determine what is necessary in the way of wiring and what voltage it is most desirable to use. Usually it is best to operate at 220 volts.

As is the case with all competitive lines, some electric sterilizers are better than others. In fact some outfits are not even good. Unless the manufacturer has had much experience, has actually developed what he has to offer, his apparatus will likely be more or less in the experimental stage. There are certain definite points which are very important and which should be investigated before purchasing.

The sterilizers should be furnished complete with every operating valve, fitting and switch necessary for the perfect control of each sterilizer independently of the others. Each sterilizer should have at least three heats. All heaters should be perfectly and easily interchangeable from one sterilizer to another, and in no case should they be built into or attached to the sterilizer so that a burnout might injure the sterilizer itself by overheating it. The idea of making the heaters all alike and perfectly interchangeable permits carrying one or two spares in stock which can be used immediately on any sterilizer in case of accident, and it greatly simplifies the work of changing heaters. All parts of the electrical apparatus including the control should conform to the standards of the national underwriters.

The buyer should insist that the manufacturer provide complete specifications and sketches showing that the apparatus will fit the space the hospital has for it, and locating the piping and wiring outlets definitely. Then when the apparatus arrives, the same care and intelligent attention should be given it that would be given to a fine automobile, and if the hospital has been wise in its selection it will have every reason for pride in its equipment.

CLINICAL PHOTOGRAPHY

THE value of photography as a means of clinical record can not be overstated. Its growing application each year to the problems of diagnosis and treatment is abundant evidence of the importance it has come to assume in the modern medical world.

The clinical camera outfit in action

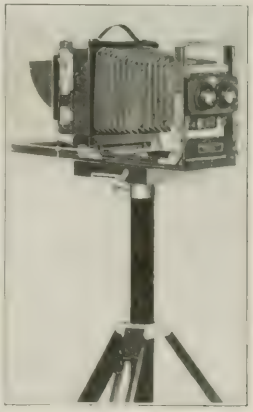
Reasons are obvious. The photograph gives a permanent visual record of conditions as they exist at the time and, because this condition is visualized, little written explanation is needed for interpretation. Surface lesions, abnormalities, pathological specimens, operating technique, for example, all lend themselves readily to such photographic record and interpretation.

The medico-legal aspects of such records also add immeasurably to their value. Many a legal battle might have been settled and many an expensive law suit saved by the photographic record of conditions as they existed prior, say to an operation or a series of treatments. The average layman who sits in the jury box may not understand medical terms, but he can understand the truth-telling photograph and judge intelligently.

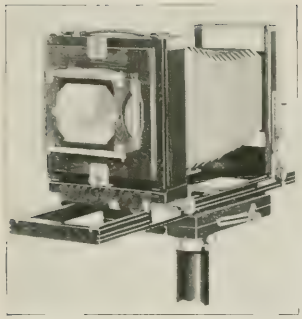
Psychic Value of Photographic Record

Then there is the psychic value of the photographic record. The anxious patient or the still more anxious parent of an afflicted child may, if the record the physician or hospital is able to show of similar or worse conditions and the contrasting record of relief wrought by treatment or operation, see hope where no hope had been seen before.

These uses might be multiplied indefinitely. It was only logical that a commercial firm, which has done much for the development of photography in general and for the advancement of photographic research, should have turned its attention to this special field of "diagnostic



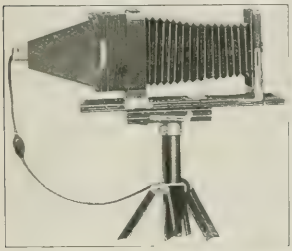
Clinical camera fitted with two lenses for stereoscopic work



Camera for lantern slide making

evidence." As a matter of fact this company established, some time ago, a medical division to meet according to its own announcement at the time, "the growing requirements of the medical profession for technical data and specialized service." This division which took over and continued the work inaugurated by its x-ray department extended its activities further into the realm of clinical photography.

Working in close cooperation with the splendidly equipped research laboratories of the company, it has been, on the one hand, in position to study the particular needs of the medical world and on the other to assist in the development of photographic equipment best suited to those needs.



Camera ready for enlarging

The result to clinical photography has been the development of a complete clinical camera outfit which precisely fits the need of the diagnostician whether for hospitals or in private use.

This outfit consists of a specially designed camera (size 5x7) with anastigmat lens f.7.7, Kodamatic shutter, collapsible focusing hood, plate or cut film holder, lantern slide back—for making slides to use in connection with lectures, etc.—an enlarging back, a collapsible stand with tilting top and two floodlights. This shutter has seven speeds from 1/500 to ½ second, as well as time and bulb action. The camera bed is scaled to permit setting the camera for images one-eighth, one-quarter, one-half or the full size of the subject. This feature enables the operator to obtain at intervals exposures of exactly the same size. For purposes of proper comparison this is highly desirable.

Photograph showing curvature of spine.

Another feature of the equipment the convenience of which will be appreciated is the tilting top, which permits subjects to be photographed in any position—lying, sitting or standing—with equal facility. This feature also permits making exposures from many different angles, while the adjustable stand gives a wide range of heights. The floodlights, which require 500 watt Mogul base lamps, is an essential unit in the outfit, its even light permitting standardized exposures.

Gross specimen heart

The illustrations evidence both the practicability of the outfit and the photographic quality of the results.

CONGRESS TO ACT ON PUBLIC HEALTH

Congress is to be asked to create a new national Department of Public Welfare, headed by a secretary who will have a portfolio in the president's cabinet. The joint committee on reorganization of the government appointed from both houses two years ago will submit a report asking for the creation of this department.

Brig. Gen. C. E. Sawyer, acting as President Harding's representative, explained to the conference of physicians in Washington recently that the new department would concentrate all of the nation's educational and public health activities under the direction of a secretary. An assistant secretary will have jurisdiction of the director generals of the four sub-divisions to be called the Bureau of Veterans, Bureau of Health, Bureau of Social Service and Bureau of Education which will divide the work of the department.

Gen. Sawyer took up in detail the work of the bureau of health through which it is hoped the United States will soon have the best public health service in the world. The Bureau of Health would assume the duties now carried on by the United States Public Health Service and expand its operations to include the 40 medical divisions of the government engaged in public health work.

Gen. Sawyer in talking to the conference said, "We are assured by all concerned in the reorganization plans of the government that they are agreeable to the carrying out of an idea which will promote the interests of medicine and make it possible to develop a public health system superior to any of the nations of the world.

MEDICAL PHOTOGRAPHY AT ST. CATHERINE'S HOSPITAL, BROOKLYN

By CHARLES A. GORDON, M.D., F.A.C.S. and WILLIAM C. MEAGHER, M.D., Brooklyn, N. Y.

MEDICAL photography is fast coming into its own. Everywhere today the photograph is mentioned as an admirable addition to the case record. Few will say it is not worth while, and no one can doubt its exact value in the permanent record of the patient.

A clear and accurate photograph of the physical appearance of the patient or the lesion is worth pages of descriptive narrative. The patient will appreciate that if he ever seeks re-admission.

For the doctor, photography is a scientific joy, for does it not mean pictures for his contributions to medical literature, and lantern slides for his lectures?

Stimulates Clinical Activity

No longer need it be said that vast amounts of clinical and pathological material pass through the great hospitals scientifically unnoticed and unrecorded. The photographic record will stimulate the clinical activity of the staff and be a factor for good in progressive medical education. This same record may at any time acquire a legal importance which needs but to be mentioned in passing.

Medical staffs with university affiliations, the great clinics, and a few individuals have for a long time realized the value of a good picture. For most hospitals and most medical men the photograph is, in the abstract, an excellent thing, needing no argument in its favor, but it is too hard to get. Ordinary photographers are unable to do the work, since they can have no proper appreciation of what the picture should show; for patients their work may be fair, but before specimens or lesions they are helpless. Even expert instructors in the commercial field admit their helplessness before the medical problem.

Photographs are worse than useless if they fail to show the whole truth. The sin of omission is the commonest fault of an otherwise good medical picture. The negative may be good, yet it may completely fail in its mission. Contour may be the important consideration in one negative; relief or outline or size or color changes in another. The best camera will take poor medical pictures unless the photographer has a definite idea of values.

Doctor Should Start the Work

In the average hospital for a time at least, the photographer must for successful work be a doctor. Standardization of technique and careful coaching of a technician will eventually give satisfactory results without more than medical supervision, but a proper organization of the photographic laboratory can only be effected by an enthusiast on the staff of the hospital. All hospitals have essentially the same problem; a few have a different solution.

At St. Catherine's Hospital, Brooklyn, we have a large general hospital with a vast amount of clinical material, a wide-awake staff and a generous and progressive board of managers. We had no photography. When one of our surgeons told our sister-superintendent that we needed a camera, it was quickly purchased. We were happy; we thought we had photography.

Our department of roentgenology, understaffed and overworked, was unable to do anything more. Our young men could not be interested, for the new field promised nothing but hard work and long hours. A few pictures were taken by volunteers. Interest waned and the camera was forgotten for about two years. The department of obstetrics and gynecology then took some pictures, made lantern slides and arranged an exhibition for the vice president of the board of managers, who at once became keenly interested and promised enthusiastic support.

Organization of the new department of photography was effected by the department of obstetrics and gynecology, which was well fitted for the task, as it was single-headed and well-staffed. An assistant in this department was detailed for special work in photography, and the photographic laboratory opened for work in the spring of 1921.

Of Value for Teaching Purposes

In the last year we have made great progress. Our assistant obstetrician-gynecologist, Dr. William C. Meagher, is now an expert photographer; our laboratory is thoroughly equipped; taking and making the picture is a standardized procedure; pictures are taken without charge for every member of the staff. We are making all our own lantern slides. This has been very valuable for those men who are interested in the teaching side of hospital work. At a meeting of the Brooklyn Gynecological Society an exhibition of photography from St. Catherine's Hospital was well received. At a recent staff conference, a lantern slide report of the activities of the department of photography was presented to the staff.

What the future holds in store for us no one knows. Eventually, of course, reorganization must take place, for the work will grow all out of bounds. Perhaps a department of roentgenology and photography will meet the situation. At any rate it has won a place for itself in our hospital world.

We wish to acknowledge our indebtedness to Dr. Nathan T. Beers of the Brooklyn Hospital for repeated advice and invaluable suggestions; without his aid we would still be getting started. We wish to thank Mr. Flansberg of the Eastman Kodak Company, who gave much of his time in lessons on printing and developing.

There is nothing hard or impossible about medical photography. As in other fields of medical endeavor the prescription for success is "enthusiasm and industry."

Cotton Mather used to say there was a gentleman mentioned in the nineteenth chapter of Acts, to whom he was more deeply indebted than almost any other person. And that was the town clerk of Ephesus, whose counsel was to do nothing rashly. Upon any proposal of consequence it was usual with him to say, "Let us first consult with the town clerk of Ephesus." What mischief, trouble, and sorrow would be avoided in the world were the people more in the habit of consulting this gentleman.

Give us to awake with smiles, give us to labor smiling. As the sun returns in the east, so let our patience be renewed with dawn; as the sun lightens the world, so let our loving kindness make bright this house of our habitation.—R. L. Stevenson.

MODERN HOSPITAL ILLUMINATION

By ALFRED J. HIXON, President, Hixon Electric Company, Boston.*

THE laws of illumination are not different in hospitals, than elsewhere. There are certain specific conditions found in hospitals, which have to be met by special applications, and in so far as these are found exclusively in hospitals they might possibly be called hospital illumination. However, hospital illumination is no different from other artificial illumination and the best results will be accomplished in every case by a thorough understanding and practical application of the more ordinary conditions and limitations governing lighting.

Illumination is an exact science. The reason for making this statement is that it is many times looked upon as a "hit or miss" matter, and invariably to the detriment of the results.

Need Proper Equipment Properly Installed

The natural laws which apply to illumination, if not fairly thoroughly understood and not properly applied, will defeat any attempt at good lighting. To illustrate, the proper illuminant and proper fixture improperly placed with relation to the area to be illuminated are just as ineffective in the result as would be the installing of an improper illuminant or improper fixture and, by the same token, the improper use of reflectors or glassware may defeat an otherwise wholly effective scheme of lighting. It is therefore desirable that in the arrangement of the artificial illumination, first, proper equipment be adopted and, second, that it be properly installed, the object of the comprehensive plan being, maximum amount of useful illumination for the minimum expense, proper consideration to upkeep and operation being given.

The importance of systematic wiring is especially to be noted. By systematic wiring is meant a consideration of the proper installation subdivided with a view of maintaining good regulation and sufficient flexibility to enable changes to be made from time to time, without impairing either the efficiency or the safety of the system. Curtailment of outlets and curtailment of switches for the proper control of lights is invariably expensive in the long run and many times defeats the illuminating system, either from a distribution standpoint or by excessive loss caused from overloading. Wiring is a matter which should only be considered by an engineer, since it is a highly technical problem, not possible of solution by laymen.

It should be emphasized that low first cost does not necessarily imply efficiency; the question of efficiency hinging upon the combination of first cost plus operating expense and upkeep, always measured in terms of useful lighting.

Modern Lamps in Old Fixtures Are Bad

A source of more trouble in existing systems than any other is the disposition on most people's part to perpetuate an existing system, though the same is admittedly in error, the practice dating back to the advent of the incandescent lamp, of substituting one form of illumination for another without due consideration for the improved characteristics of the new illuminant. In the earlier forms of the incandescent lamp this was not so pronounced, but since the advent of the tungsten lamp with its greatly improved efficiency this has become a very serious error. Putting modern lamps in antiquated lighting fixtures and expecting good modern lighting from them, is a fallacy too evident to need more than passing comment. The practice of installing larger lamps in fixtures than the fixtures are designed for, with a view of obtaining greater intensity and better illumination, is equally fallacious.

Great improvement has been made in the type and efficiency of the modern incandescent lamp, and this has made possible the entire revision of our ideas and practices with regard to artificial illumination. The early incandescent lamp had an efficiency of approximately four watts per candle power. The modern so-called Type "C" incandescent lamp has an efficiency of approximately .75 of a watt per candle power, which is something over five times as efficient as the original lamp. This, combined with the constantly lowering cost of electricity, especially where bought at wholesale rates, brings the quantity of illumination available at reasonable expense to a point where we have abandoned the idea of specifically lighting certain objects or comparatively small areas, turning to general illumination meaning, filling the area lighted full of light, so that almost any ordinary process may be carried on anywhere in the area without particular regard to the location of the illuminant. This radical change in the approach to artificial lighting has necessitated radical revisions in the ways of measuring illumination and has caused the abandonment of the old candle power ratings and the adoption of the rating of all lamps on the basis of the current consumed and measuring the efficiency of all artificial illumination on the basis of its intensity, or in other words, in foot candles per given area.

Illumination Must Not Be "Conspicuous"

All illumination is measured by comparison, but the human eye should not be used in making this comparison. The human eye is not a good photometer or foot-candle meter; it possesses a high degree of what is known as accommodation, and a large majority of all our so-called eye-strain produced by illumination is produced by this same property of accommodation on the part of the eye. This is due to one of the most common faults in illumination, namely, too great a contrast or too great a degree of difference in light intensity occurring within a comparatively small area or what might be more properly termed, the working area of the eye.

This may be caused either by too brilliant an illuminant, improperly placed, or by the use of the wrong type of equipment such as shades and reflectors. We should strive to avoid marked contrasts in illumination and to obtain the most perfect distribution possible.

An eminent authority on illumination, when recently asked what his definition was of a perfect lighting fixture, stated "that it was a fixture which furnished proper illumination without being unduly conspicuous," or, in other words, furnished the illumination without so great a degree of intrinsic brilliancy as to make itself objectionable. This is the object sought by most of our modern lighting engineers, and most of the modern illuminating units that are worthy of consideration embody these features in a more or less successful manner; it therefore remains for the engineer to give due consideration to the nature of the area to be illuminated and the use to which

*A paper read at the last meeting of the New England Hospital Association and first published in the Boston Medical and Surgical Journal.

this area is to be put, to select and install the proper lighting.

Should Be Measured by Foot Candle Meter

All artificial illumination should be measured in foot candles of useful light at the working plane and not in fixture ratings, and all fixtures and equipment should be purchased rather with the thought of economy of operation than economy of first cost, since cheap glass-ware may defeat a lighting system to such an extent that the original cost of the fixtures may be consumed many times in the coal pile and thereby prove very expensive.

For the purpose of measuring foot candles of useful light in any given area, which, really in the last analysis, is the measuring of the value received for the money spent, there is a little instrument known as the foot candle meter, which is one of our more modern products and can be recommended for its simplicity, its accuracy and its freedom from any technicalities. It can be used by anyone without the slightest technical knowledge and with the most effective results. Every institution which considers its running expense and wishes to enhance its lighting efficiency should own one of these little instruments, and the executives of the institution should satisfy themselves by its use, that they are getting what is best for them in the way of artificial illumination. General and intelligent use of this instrument, combined with the little expert advice as to improving methods and equipment, will effect a marked saving in 90 per cent of the hospitals of this country.

Cardinal Points in Illumination

To sum up the foregoing brief résumé of what might be called the cardinal points of artificial illumination:

1. Lighting is an exact science.
2. Efficient lighting requires coördination of equipment, lamps, fixtures and wiring.
3. Modern lighting is done largely by general illumination.
4. The two prime factors to be considered in lighting any given area are intrinsic brilliancy of the illuminant and equal distribution in the area illuminated.
5. Measure artificial illumination in terms of useful light rather than in fixtures or lamp ratings.

In the illumination of the sick-room, whether it be the open ward or the private room, up to a certain hour in the evening when the patients are supposed to go to sleep, we should closely simulate the home under normal conditions. This should be a cheerful illumination which requires a brilliancy of from three to five foot candles. It is essential that this illumination should be by means of a type of illuminant in which the intrinsic brilliancy, or contrast, should be very low owing to the fact that the patient is in a reclining position and therefore forced to face the general direction of illumination. This fact does not justify the placing of the illumination in abnormal positions such as from the floor, but merely means that the illumination must be sufficiently distributed to avoid high brilliancy or marked contrast.

After the hour in the evening when the principal illumination is extinguished and the patients are supposed to go to sleep, the rooms must be provided with sufficient lighting to enable the nurse to make her rounds without inconvenience or undue disturbance. This illumination must not be sufficient to wake the sleeping patients and should not exceed one half of one foot candle. Since unusual lights have a marked effect in waking the patients, it is found desirable to have this second source of illumination in the same location as the principal illumination for the room, this also giving the desired distribution.

Bedside lamps of normal brilliancy, no matter how shaded or hooded, do not serve the required purpose because of two very prominent reasons: They will not sufficiently illuminate the room to give the nurse convenient freedom of action; and they produce the contrast that should be avoided. Lights in the floor and other unusual places are not successful as long as they do not provide two intensities of illumination.

A Fallacy in Operating Room Lighting

A special application of great importance in a hospital is the illumination of the operating-room. The large majority of forms of illumination commonly used center the light upon the object. This is wrong. The problem in the operating-room is the same problem it is elsewhere, namely, filling the area full of useful light, so uniformly distributed that the eye will not be called upon to accommodate unduly, and the hand and the instrument will not cast prohibitive shadows. This can be accomplished merely by installing a suitable type and arrangement of ceiling fixtures, taking into consideration the necessity for a much higher degree of intensity and better distribution of illumination than is required elsewhere, from 25 to 50 foot candles over the entire working area.

There are other minor special applications for hospital illumination, but the two pointed out are the principal deviations which might be directly termed hospital illumination. In the remainder of the hospital, the same rules for good lighting should be applied as are applied in an office building, bank, factory or any other place where the people are doing more or less confining work and should be applied to the types of utility that are found in the various parts of the institution. The question as to proper amount or degree of illumination is, to some extent, fairly well established, such as where clerical work is being done the light on the lighting plane should have an intensity of from five to eight foot candles. In dining-rooms, kitchens and other places where the work is less confining this illumination can be cut down to four or five foot candles.

It is well, as a general principle, to avoid so far as possible specific lighting such as reading lamps, desk lamps or lamps directly over machines or tables, general illumination being much safer and much better for the person doing the work, as well as producing much better work.

Improper Fixtures Absorb Light

Electric lighting fixtures have been made a subject of special consideration for hospitals to such an extent that it has produced in the minds of many people the idea thaf there is something different about hospital lighting and hospital fixtures than about the ordinary commercial lighting and commercial fixtures. This, is an error, or at least a misconception. There exists the necessity in hospitals of having everything free from dirt and, to accomplish this end, easily cleanable. All electric fixtures, whether in hospitals or elsewhere, should be of such rugged and substantial construction that they will be fairly free from unreasonable depreciation. In the attempt, however, to accomplish these two very practical requirements, nothing should be done which defeats or interferes with the principles of lighting. A good illustration of this point is the use of clear cover-glasses; the assumption on the part of most people is that this does not interfere with the lighting. It would probably be considerable of a shock to many of you to know that as high as 25 per cent of the light is in some cases absorbed by this cover-glass, where the glass is of cheap or inefficient make. Similar conditions and failures of equipment due to one misconception or another could be pointed out indefinitely, but this will serve to illustrate my point.

STERILIZING DRINKING GLASSES

With the great improvement in dish and glass washing methods and equipment, hospital administrators have come to regard the proper cleansing and even the sterilization of both dishes and glasses as an essential in the food service of their institution. Much of the equipment, however, has to do primarily with the washing of utensils, with the addition, perhaps of steam sterilization.

Recently there has been introduced, a new machine designed solely for the proper cleansing, and the sterilization of drinking glasses. Such equipment should have a place not only in public eating and refreshment places but in institutions. Particular value attaches to the suggested method for use in contagious disease wards or pavilions.

This new electric sterilizer, recently marketed, provides an automatic means of washing, rinsing and sterilizing glasses and other small utensils. The glasses are con-

veyed in a circular motion, first to a spray of cold water to remove all surplus refuse, then to a hot alkali wash which accomplishes the cleansing, from there to another cold rinse to wash away the excess alkali, then through a sterilizing solution which instantly kills all bacteria; this is followed by a hot water rinse which assists the drying.

The machine is automatic in every detail; the hot water is heated by electricity; no additional equipment is required and it has a capacity of 700 glasses per hour. Glasses are rarely broken during the cleaning and sterilizing process, it is said. Dirty rinse water is automatically carried away after the glasses pass through and is not used a second time.

Manufacturers of this equipment after considerable experimentation found that the best sterilizing solution was sodium hypochlorite containing 0.05 per cent chlorine, the alkalinity of which has been reduced to a certain definite point by the addition of hydrochloric acid. This solution is cheap, easily made, non-poisonous and works effectively at a temperature of 80° to 95° F.

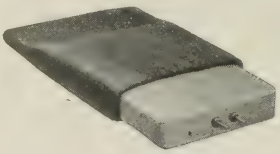
It is to be noted that the sterilizing solution follows an alkaline wash, this being a special solution of great cleansing value. Under ordinary conditions the ordinary washing process is sufficient, but for institutional use the sterilizing feature is added, giving complete assurance, according to the manufacturers, that all bacteria have been destroyed.

Drinking glasses have long been recognized as dangerous infection carriers, and this simple but practical method of washing and sterilizing should prove important for hospital use.

AN EFFECTIVE FOOT WARMER

Almost everyone can recall the days when soapstones were heated at an open fire and then carefully placed as a bed or foot warmer.

An enterprising manufacturer, however, has modernized this old method. An effective electric heating element has been inserted into an ordinary soapstone and provided with proper plug connections. Within a few minutes after the electricity is connected the soapstone is thoroughly heated and because of its peculiar qualities it will stay hot for a considerable period.

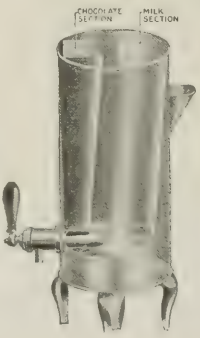


This simple method offers many advantages as a bed or foot warmer over the rubber or earthenware hot water containers and is preferred by many to electric heating pads.

SERVING HOT CHOCOLATE IN THE DIET KITCHEN

Hot chocolate is much used in hospitals as a meal-time beverage, but even more frequently it is used for between-meal feedings. However, it is a difficult matter to prepare hot chocolate that is fairly uniform and palatable. While in many institutions powdered chocolate or cocoa is employed, to which is merely added hot water or milk, a more desirable way is to use a chocolate syrup, pour milk over this and stir both together. This method, however, is slow, costly and not altogether satisfactory.

Numerous devices for the preparation of hot chocolate have been offered, including special urns equipped with an agitator or mixing attachment. In most of these methods the thick chocolate settles to the bottom of the urn and either clogs up the faucet so the liquid cannot flow or fails to give a uniform strength to each cup.



The distinctive feature of a new hot chocolate urn is that every cup of chocolate served contains the correct mixture of chocolate and milk without guesswork, and without any mechanical agitating mechanism. The operation is simplicity itself, insuring speedy operation and better service, without waste. The urn contains too sections, one for chocolate and one for milk, as shown in the phan-

Are Dentists Authorities?

Prinz

In Dental Cosmos, 1921, Vol. 63, and in his Dental Materia Medica and Therapeutic, 1916, specifies properties desirable in dentifrice as follows:

1. *Chalk:* mechanical cleansing
2. *Soap:* as an emulsifier
3. Mildly alkaline

Fones

In Mouth Hygiene—Second Edition, 1921, page 287: *"The most important ingredient* in a dentifrice is *soap.* Next, a mild abrasive, such as a fine grade of precipitated *chalk."*

Buckley

Modern Dental Materia Medica, Pharmacology & Therapeutics—Fourth Edition, page 32. Page 270 shows formulas of dentifrices, and *chalk* and *soap* are constituents of each one of them. On pages 36 and 37, the same book speaks of the excellence of chalk as a constituent of dentifrices.

Toothpaste "Ad" (NOT Colgate's)

"Dental authorities (sic) now agree that the ideal dentifrice should contain no soaps or other alkaline ingredients"!

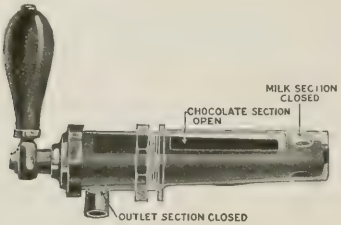
Who is Right?

***More* DENTISTS *recommend* Colgate's**
than any other dentifrice

The non-gritty precipitated Chalk in Colgate's Ribbon Dental Cream loosens clinging particles from the enamel. Its pure vegetable oil soap washes them away

Truth in advertising implies honesty in manufacture

tom view herewith. The faucet fills with chocolate, holding just enough syrup to make a perfect cup. When the handle is turned, the chocolate section of the faucet



closes and the milk flushes through the faucet into the cup. Thus the entire operation is handled in one unit at one time. When the handle is turned back the faucet fills with chocolate again and is ready for the next cup to be served. A day's supply of chocolate syrup and milk can be kept in the urn at one time.

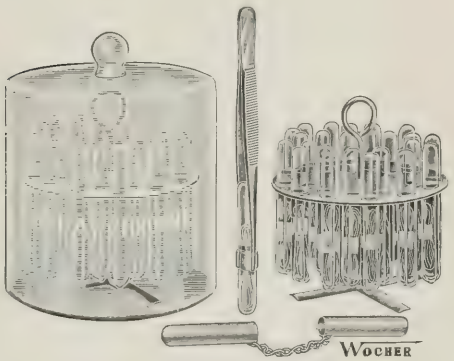
In appearance, the hot chocolate urn does not differ greatly from others. The outside body is constructed of victory silver; the inside body of copper tinned or monel metal. The water jacket between the two bodies is equipped with a water outlet faucet. The urn is manufactured in 5, 10, 20 and 40 quart sizes, for gas, steam or electricity.

MARTING CATGUT SERVICE OUTFIT

To meet the requirements of operating room procedure a special outfit has been devised to serve the surgeon with catgut as may be needed.

It consists of a series of jars for plain, ten-day and twenty-day catgut. Catgut is now supplied sterile by all makers and should not be reboiled unless specified, but all tubes should be placed in an antiseptic solution for sterilizing the outside of the tubes before breaking.

The rack on the inside of the jar has wire spring holders for the tubes to keep them immersed. The jars are marked "Plain," "10-day" or "20-day." In this way the nurse can



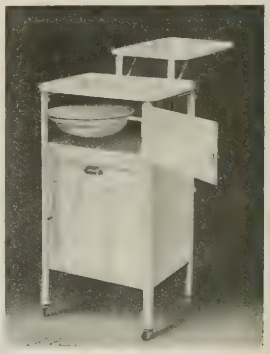
find the particular catgut wanted quickly and is able to see at a glance exactly the quantity of sutures on hand.

A pair of nickel-plated forceps for taking the sterile tubes out of the antiseptic solution is also supplied. The catgut tubes are then placed in a sterilized nickel-plated catgut tube breaker which consists of two metal tubes connected with a chain.

This outfit has been found a valuable hospital convenience.

COMBINED BEDSIDE AND UTILITY TABLE

One of the progressive manufacturers of hospital furniture lately has brought out a new combination bedside and utility table which should interest hospital executives. Through the use of this table the necessity of an adjustable bedside table for serving is removed.



The combined table consists of an ordinary type of utility table containing cupboard space in base for towels, and sundry items, a roomy drawer and a swinging wash basin which is concealed when not in use by means of a door.

The outstanding feature, however, is the folding bed tray or table. This is attached to the back of the cabinet or table by means of sliding brackets so as to be adjustable to a bed of any height, thus permitting its use for food service. This bed tray or adjustable shelf also is hinged so that it can be folded flat against the table when not in use.

The table is equipped with easy running casters, permitting the nurse to swing it readily into position so that the folding table or shelf projects over the patients beds.

This combined utility and bedside table is being used in the new John B. Murphy Hospital in Chicago.

TWO LONDON HOSPITALS UNITE

The plan adopted between Middlesex and St. Luke's Hospital in London is stated to be the first instance in England of an alliance between a large general hospital and a registered hospital for mental diseases. By cooperation in respect of funds, material, personnel and experience in management the two hospitals are expected to attain the ideal in the treatment of early mental and functional nervous disorders while securing greater economy.

Two new wards, for male and female in-patients, would be established in Middlesex Hospital, where patients will be treated by the medical staff of St. Luke's Hospital. A special out-patient clinic would be established for dealing with borderline cases, which would practically constitute a psychiatry section of the neurological department. So far as out-patients are concerned the plan involves close cooperation of the two hospitals and is a step toward a system which can and may be extended with advantage in other directions.

As was stated in the report of the court of governors of the Middlesex Hospital, among the chief reasons which led to the adoption of the plan was the marked disinclination among persons suffering from early mental disorders to consult the specialists at a hospital known to deal only with mental diseases. Such people were far more likely to attend a general hospital for treatment on the appearance of their first symptoms. Early treatment on the right lines went a long way toward effecting a cure; delay was dangerous, or even fatal, to a successful issue.

A Great Authority Says of Gelatine

"The available energy in meat protein is but little greater than that found in gelatine.

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DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary Committee on Dispensary Development, United Hospital Fund of New York, and Chief, Service Bureau on Dispensaries and Community Relations of Hospitals, American Hospital Association, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association 370 Seventh Avenue, New York

FOLLOW-UP IN A SYPHILIS CLINIC

By ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association, New York, N. Y.

TODAY, in every syphilis clinic, we have some activity which may be classified as mainly non-medical, although it is not strictly social service either, according to the professional use of the term. Groping with human problems is what it really amounts to, making more personal the relationship between patient and physician by stressing the fact that a patient is a human being rather than a "case." In a word, it is the sum total of all the things that are done directly or indirectly through the syphilis clinic for the patient, the doctor and the community; the human element in clinic service, it might well be called. Although it has long been lacking, not only in the venereal disease service of out-patient work, but in more or less all branches, this is the phase of social service which is being emphasized today.

Out of the abstract problem of "irregular attendance," a human problem has arisen, that of "helping the patient to stick to treatment." But what holds the patient to treatment? This is the question which interests the physician. This is the question which must be answered in order to satisfy the demand of the health officer that the patient be held to treatment, and it should be the question which interests the social worker whether he is engaged in active work within the clinic or in the community. He need worry less about some of the details of the lives of patients in these times, and more about their emotional reactions; less about the home background of the patients and more about the way they are treated in the clinic. The reception given a patient when he applies for treatment, the way his particular needs are cared for, and the goodbye that is said to him as he leaves the clinic after each visit, these are some of the factors which will either disgust him with the clinic and his own lot, or make him take a new lease on life. If the patient is treated like a human being, he is likely to stick to treatment until he is cured. Otherwise, he will invent excuses. This is not a plea for sentimentality, but rather for human understanding.

How are we meeting this problem? As far as detail is concerned in approximately as many ways as there are different syphilis clinics throughout the country. The health department, however, has a certain function to perform, and reasonably demands that definite efforts be made to hold the patient to treatment during the period of disease for which the health authority is responsible. An attempt has been made to bring together into one suggestive set of forms, the various letters, cards, and notices which are in use throughout the country.*

In New York City, in 1916, the health department considered, through its advisory council on venereal disease, the need for making rules and regulations under which clinics could be controlled. The regulations, as issued in 1917, are standards, minimum in character, but practical for the purpose of judging and controlling.

Compulsory Follow-Up in New York

Regulation 7 of the standards, referring to a syphilis clinic, says: "A follow-up system, approved by the department of health, to secure regular attendance by patients shall be established and maintained."

What kind of follow-up system will the department of health consider adequate, was the next question. In 1912, when an association of dispensaries known as the Associated Out-Patient Clinics was formed in New York City, one of its first and most active groups or sections was the section on genito-urinary diseases, skin diseases, and syphilis, to which the attending dermatologists and genito-urinary surgeons of the institutions belonging to the association were entitled to membership. The association made highly intelligent recommendations for conducting treatment clinics for syphilis and gonorrhea, and the equipment necessary for such treatment. These recommendations were the basis upon which the department of health formed its regulations for the conduct and maintenance of clinics for treatment and care of individuals infected with syphilis or gonorrhea. Section 223 of the Sanitary Code, which states that no public dispensary where communicable diseases are treated or diagnosed shall be conducted or maintained otherwise than in accordance with the regulations of the board of health, was emphasized by the Associated Out-Patient Clinics. The section on venereal disease devised a syphilis history card and a gonorrhea history card which have been adopted either in full or in part by several clinics, at the suggestion of the association. Results of these operations show that definite progress has been made towards uniformity in the instruction of patients, maintenance of equipment, keeping of records, and the like.

The great war interrupted the activities of the Associated Out-Patient Clinics, but only temporarily, for in 1920, they were resumed with additional vigor. Shortly afterward, the health department, recognizing that the sending of requests, threats or pleas by mail did not constitute an adequate follow-up system, asked the venereal

*Cleveland Survey, Part 5, Page 414; The Modern Hospital, March, 1921, page 284.

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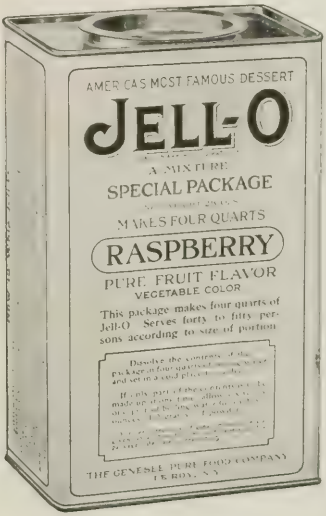
"America's Most Famous Dessert"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AND it is so acknowledged, particularly since there has come to be such a general understanding of the value of a sane diet in the preservation of health.

Jell-O is a sweet but not an added burden to digestion. It exactly fills the need of the adults who have come to the point of taking a little better care of themselves, or of the family that does not care to serve food in which children cannot join the grown-ups.

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disease section of the association to determine just what an adequate follow-up system entails, and to make recommendations accordingly.

Most follow-up systems offered to the section as effective suggest the use of notes, personal visits, and police power. It was felt that results generally indicated some happy combination in the use of the mails, the worker, and the police, which might in part solve the problem of holding the patient to treatment. But the only way to justify this conclusion was to test it, to measure the effect of each type of effort upon the attendance of some definite clinic over a given period of time. Brooklyn Hospital was selected as the site by the venereal disease section of the Associated Out-Patient Clinics, and the work started in December, 1922. The Committee on Dispensary Development of the United Hospital Fund has supplied such funds as were needed to employ extra personnel for this demonstration, which is to be regarded as an experiment, and not as the operation of a model follow-up system.

The first three months will be devoted exclusively to the one factor in the follow-up system which the clinic used in its previous mode of operation, namely, the sending out of notes. For years, the follow-up system of this clinic has functioned on the "one note a week" basis, the last note being rubber-stamped, "Your Last Chance." It is the general impression that this method of procedure has aided considerably in persuading the patient to return for treatment when he would otherwise have "failed to stick." Notes are to be sent out during the first three months of the experiment immediately upon the patient's failure to report after his first visit. This means a total period of five weeks from the last visit of the patient before the case is terminated.

Certainly this experiment will prove whether the follow-up-by-mail system greatly influences patients to report for treatment. It may do away with the too frequent complaints that patients cannot read, that they do not give their correct addresses when registering at the clinic, that friends or neighbors open their mail, that communication by mail is too slow and too expensive, and that it is unsatisfactory from the point of view of the health department in controlling communicable disease.

During the following six months of the experiment other follow-up methods than merely sending notes will be employed. Thus it is hoped there may be cleared up the questions of how much the personality of the physician, the influence of the social worker inside and outside the clinic, the cleanliness of clinic quarters, and the efficacy and comfort of treatment contribute to better attendance. After these questions have been cleared up, it is hoped that certain practical fundamentals for a follow-up system in syphilis clinics will be presented to the department of health for its approval—a follow-up system which is flexible yet definite, effective yet economical, sufficiently adequate to protect the community yet human enough to attract and hold human beings who are in need of service.

THE PHYSICIAN'S PERSONALITY

The editor of *National Health* (London) believes that the personality of the physician is a great factor in the success of a clinic for the treatment of venereal diseases, and that the psychology of the patient can by no means be left out of the count. Men coming for treatment are likely to become moody and morose, and it is exceedingly difficult to reconcile them to the tediousness of the necessary long course of treatment. For this reason the clinician must be sympathetic, dealing with the disease as with any other grave disorder. A callous manner will drive the patient to a quack. A doctor will fail of perfect success who is too busy to give the individual attention which is more necessary in these diseases than in others since the patient cannot ask others to help him as he would in dressing an ordinary wound, for example, or in applying remedies whose use implies to the public mind no discredit.

A too jocular and jovial manner, *National Health* says, such as belongs to a "type of general practitioner now happily dying out," will not impress the patient with the gravity of his disease and will leave him with a lighter heart than it is well for him to have. In avoiding the Scylla of flippancy, however, the physician must not drift into the Charybdis of lugubriousness and repel patients by preaching at them. Whatever sermon is delivered should concern the importance of obeying medical orders, not be a pointing out of moral lapses. The successful clinician must have tact, wisdom and administrative ability. He should be "the acme of punctuality," and should see to it that there is no favoritism in the order of admission. *National Health* continues:

"The cases are all of equal importance. Some people suggest that the entrance to the clinic should be a secret one. Secrecy itself would be likely to draw attention. These diseases should be treated as openly as possible; otherwise odium will still pertain to the unlucky victim of the disease and so be likely to deter him from seeking treatment. In the clinic, it would seem, lies a valuable opportunity for educating the incontinent on the dangers of venereal disease and of impressing upon such individuals the necessity for observing a continent habit."

HOSPITAL RATES UP TO 15 CENTS PER DAY IN CHINA

It costs the majority of patients 15 cents a day for hospital and medical care at the Williams-Porter Hospitals, Tehchow, Shantung, China.

Since 10 cents is a good daily wage for the man fortunate enough to have a job, the hospitals cannot well charge the full fee of 40 cents a day which the patient's board, nursing, medical and surgical care really cost.

The rate of 15 cents a day applies to third-class patients who make up the large proportion of in-patients. Charity cases are provided for from a special fund, which is usually exhausted.

These facts are gathered from Mr. F. F. Tucker's annual report of the Williams-Porter Hospitals. During the year the mission hospital has had material improvements and additions which cost $2,000 gold, bringing the total investment in buildings and equipment up to $70,000, based on replacement value. A small private ward building has been erected during the past year, the upper floor of which is occupied by two foreign nurses; wide verandas have been added to the three ward pavilions, two of which are now used as nurses' homes; and a utility building has been constructed which houses the morgue and several horses and goats.

The hospital makes a feature of its goat dairy, the milk being used for patients. The annual report shows that during the past year there was acquired a fancy, full-blooded Toggenburg by the name of Superlative Roger. Other mission stations have been supplied goats from this hospital dairy and in more than a dozen towns of northern China, Williams-Porter Hospital goats are furnishing the milk.

A total of 891 in-patients and 16,176 out-patients have received treatment at the institution during the past year.

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ADMINISTRATION BUILDING, STATE HOSPITAL FOR INSANE, WARM SPRINGS, MONTANA. ARCHITECTS, ARNOLD AND VAN HOUSE, BUTTE, MONTANA. ENGINEER, I. J. SULLIVAN, SULLIVAN VALVE AND ENGINEERING COMPANY, BUTTE, MONTANA

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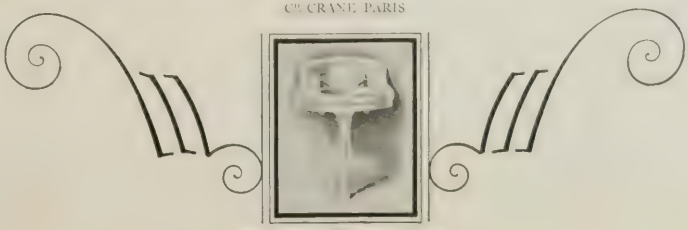

Crane Luxurious Vitreware—"Rivoli"

OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by HERBERT J. HALL, M.D., Devereux Mansion, Marblehead, Mass., and MRS. CARL HENRY DAVIS, Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.
Co-Editors: LORING T. SWAIM, M.D., 372 Marlboro St., Boston Mass., and MISS MARY E. P. LOWNEY, Room 272, State House, Boston, Mass.

OCCUPATIONAL THERAPY FOR ARTHRITICS

By LORING T. SWAIM, M.D., Boston, Mass.

Recently some rather interesting experiments in occupational therapy for arthritics have been carried on at the Robert Brigham Hospital on Parker Hill, Boston. So many arthritics are crippled with deformed and apparently useless hands that an attempt has here been made to reconstruct and increase the functional capacity of such hands by graded work.

At first, it was found that even the simplest kind of work, such as pulling wool, was beyond capacity. By persistent effort, however, nearly all cases were found to be able with practice to do this work. As soon as a patient could successfully and consistently pull the wool apart, and the hands had developed muscular strength to do this without undue fatigue and soreness, a small hand rake was used for carding the wool. This demanded more strength in the hands and forearms, but the progression was usually possible. The patients could see the progress. Feather bone baskets were then attempted, as this material was easier to work than rattan or reed, and did not have to be wet. This work with the various stitches required more delicate technique and coördinated use of the muscles of the hand, and was found to be the next logical step in the development of better functional capacity of the stiffened fingers.

It was interesting to note that as the work progressed, the joints instead of becoming lame became stronger and more supple, and the tone of the tissues improved. Next, rattan trays and rattan baskets were started, the rattan being softened more than is usual, so that the patients could work without too much effort. This developed more strength.

It is hoped that by this progressive use of muscles, the development of effectiveness in deformed hands will not only give the patients a new outlook on progressive work, but will actually reconstruct the hands so that they can be used for the ordinary purposes of life. Further development of the serial work, such as sawing, sandpapering, ultimately modelling and the use of tools, is planned.

The work has been very encouraging. The patients have cooperated, and it has been interesting to note that because of illness of the instructor and the cessation of work temporarily, the patients have asked to be allowed to keep on by themselves, even if the work has to be taken apart later because of mistakes.

It seems as though the field of simple bed work of this type for the definite purpose of joint and muscle development would be an increasingly valuable factor in the reconstruction of useless, arthritic hands.

Those who bring sunshine into the lives of others cannot keep it from themselves.—J. M. Barrie.

PAINTED FABRICS FACTORY FOR CRIPPLED "TOMMIES"

Sir Frank Benson is not only a famous Shakespearean actor, but a big-hearted patriot and idealist, and it is therefore not in the least surprising that he takes a keen and practical interest in Painted Fabrics, which two somewhat cryptic words represent the movement for disabled soldiers centered at a certain factory at Sheffield, England.

During the war Mrs. Geoffrey Carter, formerly an art student, performed nursing duties at a Sheffield military hospital. Finding that time hung heavily on the hands of some of the wounded, she set them to work painting artistic designs on fabric. This was found to be not only a popular amusement, but a great benefit to the men's health. Starting the movement in 1915, Mrs. Carter has since devoted herself to it. It was found that the work of the men was saleable, and originally the proceeds were devoted to the object of purchasing comforts for the hospital. Later a factory was established in which some thirty disabled men are now employed, and when funds are available a larger number will be provided with work there.

Sir Frank Benson was asked how he came to take up this movement for the disabled. He replied: "I don't know that I have taken it up—it has taken me up." Sir Frank explained that he was recommended to get some curtains for scenery done at the factory and thus heard the story of the plucky disabled men who are executing such remarkable work. He visited the factory and by recounting an incident of which he was then informed, gave a vivid idea of the marvels that are wrought there.

A disabled man came to Mrs. Carter and said: "I hear you give work to wounded soldiers?" "Yes," she replied, whereupon the man, holding up two stumps where hands should have been, said, "But you can't find a job for me." Mrs. Carter replied that she thought they could and inquiring if the ex-soldier had ever done anything with colors, found that as a child he had liked painting. She strapped a brush to his stump, gave him a box of colors and some canvas, and told him to see what he could do. Despite the physical disadvantage under which he labored, he made rapid progress in skill with the brush, and has become one of their best scene painters. All the men in the factory are terribly disabled; some have lost more than one limb and the hands of others are sadly maimed. But despite the pain they often suffer, they stick to their work with enthusiasm; they arrive before time and are in no hurry to "down tools," for the work is a joy to them. They have found not only occupation and happiness, but health and nervous strength. Life has come back to them with the zest they feel in their work.

An effort is made that all the work given to the men

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The nurse has a good suggestion

(The Superintendent and the Surgical Nurse were talking. Series IX.)

"Good morning, Doctor."

"*Good morning, Miss Smith—What do you recommend for sterilizing bed pans in a hospital where they have only gas for heating?*"

"That's easy, Doctor; Install a Utensil Sterilizer next to a good slop sink and you have perfect facility for the work—and get a Castle by all means."

"*You sure are strong for Castle Sterilizers aren't you Miss Smith.*"

"Yes, Doctor, I am and there is a reason. They do what is expected of them. For instance, I've never seen a Castle Utensil Sterilizer with a lift that didn't work."

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shall be of artistically sound type; for that is the kind of task that improves their health; ugly work has been found to have an effect prejudicial to their recovery.

Sir Frank pointed out that often it had been found that disabled men who had been given dull, mechanical tasks in cotton factories and at the loom or the like, had been unable to continue it. Yet the artistic task had proved a great success, which showed that the artist was not such an unpractical, uneconomic person as he had often been made out.

Sir Frank remarked that it was fine to see these men, who had been in the forefront of battle, now in the van of the movement for bringing beauty instead of ugliness into everyday life. The pet scheme of the man was to have some sort of "garden city" factory in the smoke of Sheffield.

The men paint dress stuffs, bags, blotters, umbrellas, parasols, opera cloaks, and curtains. "They are," Sir Frank Benson remarked, "great gentlemen, for their courage is amazing, and they show in the factory just those fine qualities which won the war. They are full of kindliness and consideration."

During the tour of the Benson Shakesperean Company in South Africa and elsewhere sales were set on foot which resulted in the disposal of between £4,000 and £5,000 worth of the charming fabrics produced at the factory. *Times and Mirror*, Bristol, England.

WORK CENTERS FOR TUBERCULOSIS CONVALESCENTS

In an abstract published in the *National Medical and Surgical Survey* of an article by Hans Haustein on tuberculosis in Scandinavia, the following interesting statement is made:—

In Norway, occupational therapy can be carried out better in sanatoriums than at home. An occupation cure sanatorium which shall prepare patients for the transition from a tuberculosis hospital to free active life is planned.

It will be remembered that at the recent meeting of the American Occupational Therapy Association in Atlantic City, the president-elect, Mr. T. B. Kidner, gave it as his opinion that the establishment of convalescent work centers is the next development which should be striven for in tuberculosis work in America.

WHY FIVE AIDES FAILED TO GET JOBS THEY WANTED

A prominent occupational therapy worker recently has called attention to a series of letters written by occupational therapy aides in application for positions with physicians as chief therapists.

All of these aides were women and girls of good educational background who were applying for positions of responsibility. The letters were so notably unprofessional in tone and structure that the doctors addressed were prejudiced unfavorably.

Business and professional women in general realize that the first approach by letter to an employer counts greatly for or against the applicant. A number of the aides referred to in this article were recommended to doctors, applied for positions and then carelessly allowed the date of the appointment with a busy doctor to go by only to send a trivial excuse many days later.

In other cases, aides accepted other positions and neglected to notify the first employer waiting for an answer; others failed to answer letters at all, or worded letters in a tactless way so that the recipient was put in a negative mood toward the applicant. The following are five concrete examples:

CASE I.

Made no reply whatever to letters sent her.

CASE II.

Filed application for position, made definite appointment to take position for a month's trial; did not appear at date designated; did not write excuse, "illness in the family," until about three weeks after the date of appointment. Lost the position.

CASE III.

Filed application, wrote two letters in regard to the position. Dropped the correspondence with no final reply to the doctor.

CASE IV.

Wrote letters and filed application for a position. Was asked to come on trial visit. Made two definite appointments with doctor for a special hour of day. Failed to appear on either occasion. Later came the small excuses, "lost the train," "had an unexpected visitor."

CASE V.

Filed application for position of chief therapist; was being considered, as background was good; wrote a letter over-emphasizing the question of salary. The gist of the letter gave the impression that money was the main object, and not interest in the work. Applicant lost the position.

These cases, of course, do not represent the majority of occupational therapy workers, but in the particular cases cited the same doctors received a number of unbusinesslike letters. The carelessness of a few may give a wrong impression and bring out the criticism in certain localities that occupational therapists are unbusinesslke in their training and methods of hospital approach.

THE ROLL CALL

Illinois

Officers of the Illinois Society of Occupational Therapists for 1923 were chosen at the January meeting, as follows: president, Miss Katharine Staples; vice president, Miss Elsie Hassenstein; treasurer pro tem and corresponding secretary, Miss Lucille Guertin; recording secretary, Miss Grace Herbst.

Various changes in the personnel of the officers have taken place recently. Miss Kathryn Bartlett, vice president in 1922, was compelled to resign when she was transferred to the U. S. Veterans' Hospital at Sheridan, Wyo. Miss Marion Clark, chairman of the auditing committee, took a position in Michigan and Miss Spainhauer was appointed to take her place. Miss Winifred Brainered found it necessary to resign the treasurership and Miss Guertin was appointed to fill out her year.

Owing to the growing needs of the society, a complete revision of the constitution is being made by a special committee, and it will be presented to the convention at the regular meeting in late February.

Manitoba

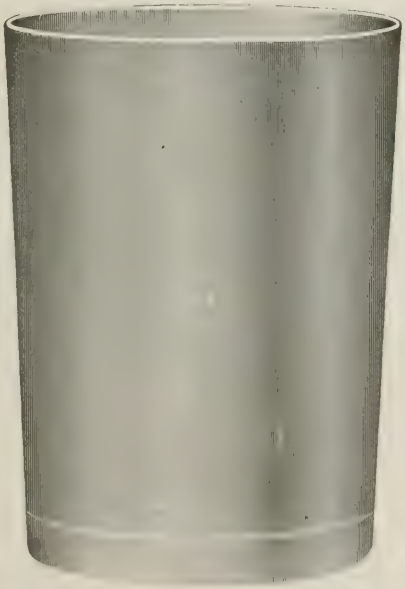
No report.

GLASS TUMBLERS

Mr. Hospital Superintendent:

You will find at the end of a year, if the matter is checked up, that glass tumblers will actually cost you less money, than is the case, if drinking vessels made of any substitute material are used.

And when, in connection with this fact, you consider the many manifest advantages of glass, why hesitate as to the type of drinking vessel to use in your institution?



HAZEL ATLAS Tumblers are especially adapted for Hospital service; the glass itself from which they are made is of a texture that will enable you to sterilize the tumblers repeatedly for months without effect. In making the Tumblers a machine process is used by which the most durable ware ever turned out by the Glass Industry is produced. So that our Tumblers will stand up longest under the necessarily rough usage to which they are put in the ordinary every day work of an institution such as a Hospital.

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HAZEL-ATLAS GLASS COMPANY

Wheeling, West Virginia

Maryland

Offer of a room in which the Maryland Occupational Therapy Society may hold its regular meetings has been made by the Phipps Pyschiatric Clinic of Johns Hopkins Hospital. Vote on the acceptance of the offer and on the hour of the meeting has been taken by mail.

The following officers have been elected for this year: president, Mrs. Marshall L. Price; vice president, Miss Katharine Brady; secretary, Miss Mary Bennett Bean; treasurer, Miss Nell Berry; chairman of membership committee, Miss Elizabeth Angle; program committee, Dr. William Rush Dunton, Miss Freeman and Miss Gilpin.

At the December meeting held at the Medical and Chirurgical Faculty Building, Miss Stewart of Canada was the speaker.

Massachusetts

Officers of the Massachusetts Association for Occupational Therapy elected at its recent second annual meeting are: president, Dr. E. G. Brackett; vice president, Dr. John D. Adams; secretary, Miss Marjorie B. Greene; and treasurer, Herbert Nash, Jr. The bureau director is Miss Harriett A. Robeson and the chairman of the bureau committee, Mrs. Horace Morison.

Michigan

The February meeting of the Michigan Association of Occupational Therapy was held at the occupational therapy shops of the Juvenile Court Detention Home of Wayne County at Detroit. The previous meeting took the form of an inspection tour of the Cass Technical High School in Detroit and great interest was displayed in the modern equipment of the school plant. The metal and jewelry rooms were particularly interesting. The wood turning and working department of the school just opened last month.

Northville Sanatorium has installed a department of occupational therapy, of which Miss Ida Kerchoff, a Newberry House graduate, is the director.

Another graduate of Newberry House, Miss Hazel Baxter, has taken a position with the Psychopathic Hospital in Ann Arbor, as head of an occupational therapy department.

Minnesota

Occupational therapy from three viewpoints was considered in an interesting program of the Occupational Therapy Association of Minnesota held on February 6 at St. Paul. Miss Julia Bradley of Fergus Falls State Hospital spoke on "Occupational Therapy for Mental Cases." Dr. Laird of Nopeming Sanatorium, St. Louis County, discussed the subject in its relation to the tuberculosis patient, and Miss Clark of Phalen Park State Hospital for Crippled Children, St. Paul, told of the work with children.

Missouri

The Missouri Association for Occupational Therapy is glad to report that there is no shrinkage in the number of places demanding occupational therapy. During the last two months work has been opened in the Miriam Convalescent Home, Home for the Aged and Infirm Israelites, and reopened in the Night and Day Camp; the time for work has doubled at the Jewish Sanitarium. In addition to this, the work, of course, has been going on in the following hospitals for varying lengths of time: City Hospital No. 1, City Sanitarium, U. S. Veterans' Hospital, Barnes Hospital, Junior League Workshop, St. Louis Children's Hospital, St. Vincent's Institution, and Koch Hospital.

The Missouri Association for Occupational Therapy does not in all cases direct the work in these hospitals but it stands ready to offer any form of help or cooperation that is within its power. The St. Louis School of Occupational Therapy, which is, of course, directly under the directorship and support of the association, is full to capacity, and the advantages of its location at the Washington University school of medicine are even more numerous than had been hoped.

A Christmas sale of articles made by the patients in all hospitals and convalescent homes was held on December 11-18, at one of the downtown stores. Over $600 were the net results; the gross results were immeasurable for educating the public, as a part of the aim any sale should have.

New York

No news to report.

Ontario

No report.

Pennsylvania

The occupational department at Harrisburg State Hospital is now under the charge of Mrs. L. Gaffney, chief therapist. Mrs. Gaffney is a Pratt Institute graduate and has had a practical background of social service experience, in addition to her work with ex-soldiers.

Women patients at Harrisburg are grouped into three sections. The more responsive types have their workroom in a cottage, originally presented the hospital by Dorothea Dix. Two classes, averaging twenty-five patients each, are carried on daily on the disturbed wards. Two groups of deteriorating patients also are at work on the wards. This brings the total number working daily up to 125. Mrs. Gaffney has three assistants, well trained attendants who have had experience in charge of wards.

On January 1 a new occupational department was organized at the Hospital for the Insane at Retreat. Mrs. Alice Messinger, the chief therapist, is a graduate of the Boston School of Occupational Therapy and has had practical nursing and hospital experience. The occupational work at Retreat is receiving enthusiastic support and it is hoped that it will develop progressively.

Washington, D. C.

No news to report.

Wisconsin

The fortnightly meetings of the Wisconsin Association have continued. After the meeting, members dine together after which they visit one of the social agencies of Milwaukee. In this way a splendid cooperation is developing between the occupational therapists and the social workers of the city.

The Junior League of Milwaukee held a Christmas sale of patients' work in December, and also a very successful Christmas party at the Columbia Hospital Curative Workshop. Members of the patients' families were invited to the party.

National Home for Disabled Volunteer Soldiers

Headquarters has issued a circular of detailed instructions for occupational therapy in the National Military Home Service. This has been sent to all homes having occupational therapy departments, with the purpose of using these instructions as a guide in developing a definite and uniform standard for occupational therapy in the service.

The Pacific branch, Sawtelle, Cal., has recently added landscape gardening to the list of occupations prescribed

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The ARISTON Line

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IS ALWAYS Fine

Peas or Beans **BROSIA MEALS** "That Good Soup"

THESE delightful and wholesome foods make the best, easiest and most economical of soups.

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To 1 gal. soup stock add 1 cup Pea (or Bean) Brosia Meal. Sauté a few diced carrots, turnips, onions, and small pieces of salt pork; add to the soup and cook until the vegetables are tender. Then add 2 cups peas or navy beans. Season. Do not strain.

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for patients in the occupational therapy department. In connection with this the patients are receiving instruction in such correlated branches as art cement, including the construction of garden benches, etc.

At the Marion National Sanatorium, the new building for the occupational therapy department was ready for occupancy the early part of November, so that the department is now permanently established in its new home. The abundantly lighted and well ventilated shops have made working conditions most satisfactory.

The occupational therapy shops in the new tuberculosis unit opened the first of January.

At the Central Branch, Dayton, Ohio, the occupational therapy shops in the new tuberculosis unit are being equipped with motor-driven machinery, and other equipment necessary for shops working with this type of patient.

The Dayton Art League has generously offered the resources of its school to those ex-service men in this hospital who are planning to take up some branch of industrial art as a vocation, when they are discharged from the hospital. They have further offered to make any possible contact with the occupational therapy department which will assist in the rehabilitation program for the disabled ex-service men, even to the point of sending their instructors to the hospital to lecture to the men. A program is being worked out, whereby such patients as are fitted for this training can reap the benefits of this generous offer.

In the occupational therapy department of the National Sanatorium, Johnson City, Tenn., the number of patients for whom the work has been prescribed has increased from 273 to 497 in the past month.

Poultry raising has been added to the out-door activities prescribed for the patients in the hardening process.

Miss Edith Bond, formerly instructor in the Henry B. Farvill School of Occupations, and later chief therapist at the Wesley Hospital, Chicago, is now in the National Military Home Service at the Pacific Branch.

Miss Myra B. Robinson of Chicago, a graduate of the Henry B. Farvill School, has accepted a position as occupational therapy aide in the home service, and is stationed at the Central Branch.

Miss Edith V. Evans, formerly connected with the occupational therapy department at Trudeau, N. Y., is now stationed at the Johnson City National Sanatorium.

Miss Sarah Kennedy, formerly superintendent of occupational therapy of City Hospital, St. Louis, Mo., is now with the Home Service, and is stationed at the Central Branch, Dayton, Ohio.

FOUR DUTIES OF O. T. TEACHERS

Occupational therapy teachers have four main duties, according to Miss Elsie Taft, R.N., director of reconstruction aides at Walter Reed Hospital, Washington, D. C., in a paper read at the District of Columbia League of Nursing Education at a recent session.

The duties ascribed the occupational therapy teacher by Miss Taft are: toward the physician, toward the patient, toward the organization, and toward the outside world.

"The teacher's duty toward the physician," said Miss Taft, "is that of filling his prescriptions for his patients. Theoretically and ideally, the physician prescribes the kind of work he wants given his patients. Practically, the physician is so busy keeping up with the latest discoveries in special diseases that he has very little time to keep abreast of developments in occupation therapy. Just as no physician would engage an expert dietitian and then do all the cooking himself, no more would a physician engage a trained occupation teacher and reduce her activities to the level of his own knowledge of crafts.

"The duty of the teacher toward the patient is instruction and diversion. For curative work she must have knowledge of anatomy, of disabilities, and of the application of different kinds of work as treatment for disabilities so clearly in her mind, that she can judge accurately and without hesitation which particular form of work suits the individual case. She must see that the patient is regular in attendance; she must stimulate his desire to recover or master his difficulty; she must try to put him on work that he will desire to continue afterward as a vocation or as a hobby, and she must encourage his feeling of self esteem by letting him fill orders or do work which people are willing to pay for. To use occupations as a means of serious instruction as well as of diversion for the patient, the aide needs not only an attractive personality, but also a knowledge of salesmanship.

"The duty of the teacher toward the organization is primarily cooperation; her success in the institution depends upon that, but the scope of her work should include more than pleasant cooperation. The aides at the Walter Reed General Hospital have established a system, which though entirely separate from that of the social service aides, by working along some of the same lines and in closest cooperation, is a recognized factor in the morale work of the hospital. They do much in a quiet way to safeguard the health of the patients. They endeavor to replace gambling with saner forms of entertainment; they dissuade patients from leaving the hospital before the surgeons are willing that they should go; they are constantly on the watch for signs of bootleggers, undesirable looking visitors, for pernicious influences of all sorts that creep into a big hospital where there are many convalescent young men.

"Toward the outside world the teacher's duty is to send the patients out of the hospital better citizens than when they came in, in better health, with something added to their education, and with their ideals developed."

CALLS ATTENTION TO ERROR

Miss Hannah Curtis, director of social work of the Massachusetts department of mental diseases, takes exception to the subheading in her article on "Social Service in the State Hospital" published in the November issue, which reads "patients cured as social service develops." It should have read "increased number of out-patients under social service." Inasmuch as social service makes no claim to cure mental patients, Miss Curtis feared that the subheading would give a wrong impression that might seriously handicap the development of state hospital social work in some places.

"Books are masters who instruct us without rods or ferrules, without words or anger, without bread or money. If you approach them, they are not asleep; if you seek them, they do not hide; if you blunder, they do not scold; if you are ignorant, they do not laugh at you.—Richard de Bury.

"In life insurance and such like societies, were they instead of having the persons examined by a medical man, to have the houses, conditions, ways of life, of these persons examined, at how much truer results would they arrive."—Florence Nightingale.

Adv. page 62

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FOREIGN CORRESPONDENCE

ST. ANDREW'S CLINIC

(By Our London Correspondent)

PERHAPS no one in the world has done or is doing more for the future of medicine than Sir James Mackenzie, who, taking all things into account, is the most outstanding preventive physician of the world and from the medical point of view the one who has the most original ideas.

Mackenzie's first claim to fame was his investigations and discoveries which revolutionized knowledge of the heart and its manner of working, its diseases and disabilities and consequently its methods of treatment. Most of Mackenzie's views concerning the heart were gained by patient investigation and persistent clinical observation while practising as an ordinary general practitioner in an uninteresting and somewhat sordid cotton town, Burnley, situated in the cotton mill district of Lancashire. After a time MacKenzie made so great a reputation that he was persuaded to come to London, where he lived for a few years as a consultant and heart specialist.

Soon after the end of the war he retired to St. Andrew's, Scotland, where he has founded an institute to give effect to the ideas for tracing the causes and beginnings of disease. His views are somewhat as follows.

General Practitioner Essential

While giving due credit, to the value of laboratory methods, he points out that the human body cannot be successfully treated in fractions, and that bacteriologists, chemical analysts, etc., cannot take the place of skilled doctors who treat the patient as a whole, or, to express the situation in other words, who treat the patient and not the obvious symptoms which he exhibits. Mackenzie urges with much force that the human body is not a departmental affair, but that its organs act and react upon each other. For example, heart trouble may not be, very frequently is not, due to a defect of that organ, but some underlying cause perhaps present in a remote part of the body. He voices the fear that in a mass of detail the profession may overlook general principles.

Mackenzie argues also that students cannot be adequately trained by professors and laboratory experts alone, and that those intended for general practitioners should receive further instruction from men of wide experience in general medical work. He makes the startling statement that general practitioners were unrepresented on the commission to consider medical education and that no general practitioner was called as a witness to explain in what respects the class had found by practical experience their own education to be defective. He contends that the investigation of the causes and beginnings of disease is the crying medical need of the present day and that for this purpose general practitioners who have the opportunity for studying patients over long periods are the only ones who can carry out such investigations properly. He asks how one can find out the manner in which a disease originates if one only studies the patient when it has reached a more or less acute stage or after the patient is dead?

Watches for Cause of Disease

Minor ailments may be the origin of more serious diseases, and Mackenzie points out that in hospitals the lesser ailments are necessarily treated by novices in the outpatient department; moreover, conditions make it impossible to keep a record of each patient over a series of years. In his opinion this can be done only by observant general practitioners who have been trained thoroughly in the practice of diagnosis, and he and the staff at St. Andrew's are engaged in teaching medical practitioners how to become skillful in this direction. To put the matter in a nutshell, the ordinary method is to begin with the disease and work back to find the cause. Mackenzie holds that the proper method is to watch for the cause and work up to the disease. He does not, however, underestimate the value of laboratory work which has done so much in the way of prevention and cure. His argument is that the two systems must work together for the common end. For the purpose of diagnosis and treatment the doctor must still rely in a great measure upon the intuitive knowledge of the symptoms of disease which can only be derived from long experience in dealing with the sick. At the Andrews' Institute, Mackenzie and his staff are working on the following lines:

1. The investigation of diseases before the occurrence of any structural change in any organ of the body, with a view of providing a diagnosis at a period earlier than is possible by the methods now in use.

2. The investigation of minor symptoms and maladies which interfere with efficiency or comfort with the object of determining: the mechanism of their production, and their bearing upon the future health of the patient.

3. The study of the conditions under which the patient lives such as food, work, and surroundings.

4. The recording of cases and keeping in touch with the patients who have been seen with the aim of discovering the relation between environment, ailments and subsequent disease.

5. Follow-up of patients in order to observe the outcome of complaints.

Adv. page 64

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There is no retinning to be done to nickelware. The cost per year, for the upkeep of ware that has to be retinned is approximately 10% of the original cost. There is no up-keep to **Ninety Nine Per Cent Nickel**—it is guaranteed. The first cost is the last cost. ¶ Can you afford to own any other ware?

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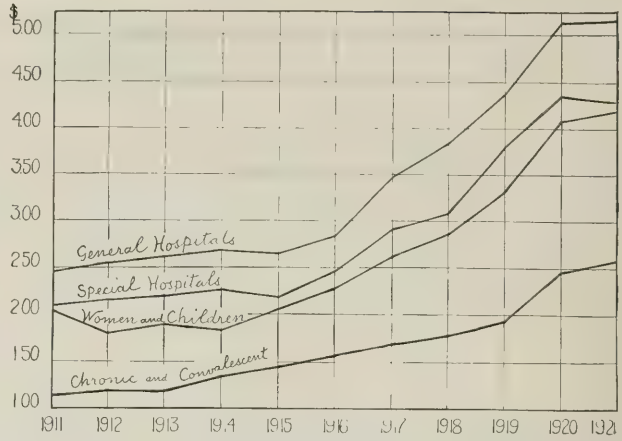
Through the Child Welfare Center the staff will be able to obtain records of all infants born in the district and continuous records of their health as they grow up to maturity. The common diseases from which people suffer are not, as a rule, those which cause death. Ailments of the digestive system amount to 25 per cent of consulting room cases, but only six per cent of deaths are due to that cause.

But it must always be borne in mind that grave diseases frequently originate from affections of the gastro-intestinal tract. Sir Arbuthnot Lane, another man of original mind, for years has been insisting that a long list of serious maladies, including forms of cancer, originate from intestinal stasis and the subsequent auto-intoxication which it brings about.

Sir James Mackenzie's views, of course, are of a preventive nature. His idea is diagnose quickly and accurately and treat efficiently so as to nip the process in the bud. But in order to carry out these views adequately the medical practitioner requires not only infant welfare and maternity centers, but the establishment of small hospitals in all parts of the country and a reorganization and coordination of the existing system. The hospital service of an area should be brought into much closer relation with the medical practice of the area. Some practitioners should be on the staff of the hospital, all should look to it as a center both of education and assistance in the discharge of their professional work, and all should be enabled to send patients to its wards, not only the critical or surgical cases as now, but many others that really stand in need of efficient hospital treatment, observation, dietary, nursing, massage, etc.; in order to treat efficiently the beginnings of disease which have been diagnosed by the general practitioner.



This chart shows the increase in the daily per capita cost for all patients, private and ward, in the fifty-eight hospitals of the United Hospital Fund, New York City. Cost for all classes of patients has doubled in the ten years.

Scheme Calls for Small Hospitals

The hospital system in Great Britain should be enormously enlarged so as to include among its patients the middle class, the members of which at the present time are unable to derive benefit from the services of the hospital which are open to the poor. As has been constantly emphasized in these letters the pay system should be introduced into British hospitals, not as now in a tentative and timid manner, but on the same scope and scale as in America. Let each pay according to his or her means. As the editor of the *Lancet* wrote some time ago: "The prevention of disease is as much the role of the practitioner as the cure and care of patients."

This is the era or the commencement of an era of preventive medicine and Sir James Mackenzie's views are essentially preventive. Hospitals must take a part in these methods of prevention; indeed their adequacy in numbers and efficiency are absolutely necessary to its success. The future of medicine in this country lies in its hospitals, and it will not be long ere a much larger proportion of the population will be treated in hospitals for all kinds of ailments and diseases from which all sorts and conditions of men and women suffer.

There is no country in the world in which everything can be provided for by the laws, or in which political institutions can prove a substitute for common sense and public morality.—De Tocqueville.

NEW SWEDISH SANITARIUM AT DENVER

A new $400,000 hospital for persons of every nationality and creed will be built in Englewood, a suburb of Denver, Colo., by the Swedish National Corporation, according to the announcement made by the officers of the corporation.

The first three units of the hospital will be started early this spring, but the institution is not expected to be complete for about four years. The completed hospital will cover approximately two blocks, being bounded by South Clarkson and South Pearl streets and Girard and Hampden avenues.

When completed the hospital will include thirteen buildings, accommodating 125 patients. There will be six pavilions, an administration and medical building, a recreational hall, a dining hall, a power plant, a laundry, a nurses' home and other buildings.

The project is being financed by five denominational churches and several fraternal organizations. It is to be operated on a non-profit basis, according to the officers of the corporation, and will be a national institution with no distinction made as to creed or nationality.

The Swedish National Sanitarium now occupying the site where the new buildings will be erected will be torn down.

"It is not the critic who counts," said Theodore Roosevelt, "not the man who points out how the strong man stumbles or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena; whose face is marred by dust and sweat; who comes short again and again because there is no effort without error and shortcoming, but who does actually strive to do the deeds; who does know the great enthusiasm, the great devotion; who spends himself in a worthy cause who at the best, knows in the end the triumph of a high achievement, and who at the worst if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat."

"Keep your fears to yourself but share your courage with others."—Robert Louis Stevenson.

Adv. page 66

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Book Reviews and Current Hospital Literature

ORAL ROENTGENOLOGY

By Kurt H. Thoma, D.M.D., Assistant Professor of Oral Histology and Pathology; Member of Research Committee, Harvard University Dental School. Second edition.[1]

Dr. Kurt H. Thoma in his book "Oral Roentgenology" is filling a demand that is realized more at this time than ever before and will continue to increase in importance as the subject is investigated further.

Oral roentgenology is the key to so many phases of difficulty in other regions of the body that it is being employed to a greater extent in connection with various branches of medicine and surgery, particularly in reference to focal infection with its remote results. Also of importance is a more complete knowledge of local conditions which necessitates a broad experience with pathological process both in bone and soft tissues. Dr. Thoma's treatise indicates an excellent perspective of the situation and he has handled the subject in a logical way, beginning with an exposition of normal tissue and the normal processes for comparison with tissue changes by pathological processes.

Much progress has been made recently in the selection of treatment of the various pathologies. Full knowledge of the result of treatment is required from time to time to direct intelligent care of these conditions.

The student is enabled to grasp Dr. Thoma's conception of the subject by the excellent style of the descriptive work; his illustrations also are exceptionally good, showing a clearness of detail not often found. This book is valuable not only to roentgenologists, but also to dentists and internists and will prove a valuable addition to the books in almost constant use.—S. J. A.

ANIMAL PARASITES AND HUMAN DISEASE

By Asa C. Chandler. Second Revised Edition[2].

Doubtless every biologist who gives a course in animal parasitology has wished for the presentation in a textbook of the general principles of parasitology, (the biology of parasites, the interrelationship of parasite and host, etc.), rather than a mere catalogue of the known species of parasites of man, as many of our textbooks on the subject have a tendency to be.

This need has been more nearly met by Dr. Chandler in the present book than in other modern textbook of parasitology. A still more frequent use of general biological principles and of our knowledge of parasites other than human ones would have substantially added to the value of the book to all addressed, the lay reader, the physician, the public health officer, the nurse and the college or university student.

Of the more important changes and additions in the new edition, the reorganization of the account of the amoebæ is particularly noticeable. The organization is superior as well as up-to-date. Although the author corrected his earlier statements concerning the life history of craigia on page 132, he failed to make a similar correction on page 35. The illustration of endamoeba gingivalis (on page 145 of the first edition) is missed.

Of the other changes the practical aspects of certain chapters merit especial mention. The methods for the detection of the parasitic worms are of recent development, and while the methods for the control of fluke diseases are new they will require extended application before general acceptance.

The typographical errors noticed by the reviewer are few. Malinston on page 7 should be Malmsten. Apparently in the attempt to add new material on the control of flukes without changing the paging of the book, a part of a paragraph on the life history of flukes was omitted at the top of page 212.

There are two rather important changes that we could have hoped for in this edition. In the first place, the chapters on the protozoa should be rearranged so as to conform to the usual zoological arrangement of the classes of protozoa as the author gives them on page 36. Secondly, the logic of arrangement is again lost in the presentation of the parasitic diptera. The "General Structure and Life Histories of the Diptera" on pages 463-466 follows the chapter on "Mosquitoes," pages 424-462. Even though the mosquitoes occupy a position of sufficient importance to be considered separately, they can be better comprehended if they are introduced after the general characteristics of the diptera have been presented. This suggestion would make the account of the diptera conform to the excellent organization in the chapters on "Bedbugs and their Allies," "Lice" and "Fleas."—B. H. W.

PRINCIPLES AND PRACTICE OF X-RAY TECHNIQUE FOR DIAGNOSIS

By John Metzger, M.D., Roentgenologist, School for Graduates of Medicine, Medical Department, University of Southern California, Southern Division, Los Angeles. With 61 Original Illustrations[3].

Dr. Metzger's "Principles and Practice of X-Ray Technique for Diagnosis" is received with pleasure.

The various topics are treated with ability and with clearness which makes this book of great advantage in perfecting technical work. The book does not go into the excessively technical features of the work and so renders it more valuable as a hand book for constant reference.

The reader is assisted in visualizing arrangement of apparatus to good advantage. The ideal positions for radiographing various portions of the body are well shown

[1] Lea & Febinger, Philadelphia, 1922.
[2] John Wiley and Sons, New York, 1922.
[3] The C. V. Mosby Company, St. Louis, 1922.

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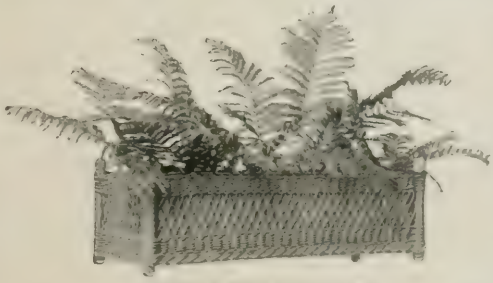

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by excellent cuts. This is of great value in getting clearness of detail of the portions to be examined by radiographing in such position that the minimum overlying shadows are caused.

Some specific paragraphs are to be mentioned some of which are possibly incomplete in their discussion; also question is raised by certain of the statements. In the author's discussion of the factors in radiographing, he makes the statement that "the time is inverse to the square of the distance," while it seems to the receiver that the time is increased directly as the square of the distance, while the x-ray intensity varies inversely.

The point gap is mentioned as varying with atmospheric condition. If the point gap is to be used as a method of measuring voltage, an important factor not mentioned is the character of the points. In fact the spark gap method is so liable to error that the operator should be advised to determine as early as possible certain points on his resistance or auto transformer which gives him proper voltage for the desired degrees of penetration.

Other assistance might be included as in radiographing the hip joints by rotation of the thighs inward to afford better views of the head and surgical and anatomical necks. In bone or chest stereos the direction of shifting the tube is sufficiently important to merit mention. In radiographing the knee joints if the condyles are superimposed a view is obtained with the least distortion of the joint.—S. J. A.

"ONE-MAN CONTROL" IN ILLINOIS

A Valuation of a System for the Administration of State Institutions through One-Man Control as Operated in Illinois. Made for the New York State Charities Aid Association by Henry C. Wright. With Introduction by Homer Folks. United Charities Building, New York, November, 1922.

With an introduction by Homer Folks, the directing genius of the New York State Charities Aid Association, Mr. Henry C. Wright's report of his study of the one-man control of state eleemosynary institutions as practiced in Illinois has made its appearance. The State Charities Aid Association, for a number of years, has watched the evolution of the management and administration of state charitable and penal institutions and has made careful inquiry into each step. A number of years ago Mr. Wright made an investigation of the state board of control plan, as compared with the decentralized system in Indiana.

The new system in Illinois became operative July 1, 1917 when Governor Lowden's civil administrative code went into effect. This code reorganized the executive department of Illinois on the cabinet or departmental plan. All of the state's charitable and penal institutions and allied agencies were grouped in the department of public welfare, with a single director serving as a member of the governor's cabinet in control. At the time Mr. Wright made his investigation, the new system had been in operation about three years, during which period no political changes had taken place in the state.

Mr. Wright's report is even-tempered and judicial. His most serious criticism of the Illinois system is its susceptibility to political exploitation. He also questions the method of purchasing supplies, of making major repairs and of erecting new buildings. Under the code, purchasing for all state departments, including the institutions, is centralized in a superintendent of purchases, a division of the department of public works. Repairs are made and new buildings planned and erected by the state architect, also a division of the same department. Theoretically such a plan is faulty, in Mr. Wright's opinion. The fact that these faults had not developed up to the time of his inquiry is nothing in favor of the system.

Mr. Wright collected samples of staple foods in certain Illinois state hospitals. These he caused to be compared with the same foods collected at state hospitals in Indiana. On the whole, taking prices and qualities into consideration, the comparison is a trifle favorable to Indiana, where the supplies are contracted for and passed upon by a committee composed of superintendents.

Mr. Wright is fearful of political interference with these institutions under the departmental system. He fears that with every new administration there will be changes in personnel, involving not only the director but the members of his staff who should be technicians, professionalized and under civil service protection.

In summing up Mr. Wright says that the institutions are clean; the buildings are in a reasonably good state of repair; and patients are well fed and clothed. Although the purchasing and receiving of supplies are not so well done as they should be, such shortcomings do not materially affect the welfare of the patients or the rights of the taxpayers. He found no conflict between departments or divisions. Action is direct, results are speedily attained and the system has secured distinct economies, he concedes.

In some states, Mr. Wright continues, good work has been done at particular institutions by alienists and criminologists. The work done by these officers in Illinois probably does not exceed in quality that done elsewhere, but it is more noteworthy in Illinois since it applies not only to those in institutions but also to those who are possible subjects for institutions. In other words, theirs has become a statewide function. "The atmosphere in the institutions of Illinois," he says, "is distinctly curative rather than custodial." If political interference exists, he says, it is "so tempered or so incidental that it has not notably affected progressive program of work." That there has been little political interference has been due, he believes, not to the system but rather to the governor (Lowden) "who placed the welfare of patients and inmates above political gain." Mr. Wright contends that the chief test of a government's system "is the results it secures over a long period involving many political changes." Such a test can not be applied in Illinois since the system had been in operation but three years at the time he made his investigation, which was in the summer of 1920. Near the end of his report, Mr. Wright says "though the system is producing unusually good results in a short time, there yet remains the question, will the good results continue? May not men in politics look on the system with covetous eyes? It would be difficult to devise a system better adapted to make effective political control . . . than the Illinois system."

The Illinois system has "undoubtedly produced good and speedy results" but the New York and Massachusetts systems have done likewise. "In these states processes have been slower but at the same time more sure."

In July, 1922, after Governor Small had been in office eighteen months, Mr. Wright added, the superintendents of four state hospitals for the insane have been displaced and the positions filled by doctors from general practice. The heads of four other institutions have been replaced by "laymen with no training or recognized qualifications." These facts seem to convince Mr. Wright that the Illinois system is susceptible to political exploitation. This is the chief defect that he finds in it.—A. L. B.

Diseases crucify the soul of man.—Burton.

Adv. page 70

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

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SUGGESTIONS AS TO INVESTMENT OF HOSPITAL FUNDS

By ARTHUR P. DAY, Vice President, Hartford-Connecticut Trust Co., Hartford, Conn.

THOSE fortunate institutions which are guided by experienced bankers need look for no help in the conduct of their finances beyond their own board, but those having the care of the smaller hospitals may at times feel in doubt as to the course that should be pursued.

A clear understanding of what the hospital may invest in is the first requisite. Generally, be it a quasi-public or public institution, there will not be found any direct restriction in the field of possible investment. The trustees are not limited as court or bank trustees are limited under the statutes. However, the continued success of the institution demands virtually the same need for safety for unrestricted funds and those held under testamentary trusts, and a fixed standard approximating the legal one is advisable.

The wise placement of a hospital's funds lies in making safety the highest factor, and income decidedly secondary. A hospital does not ordinarily need a bond that has a particularly active market or a bond that is exempt from taxation, and it should not pay to acquire such characteristics. A fair percentage of carefully selected mortgage loans, some U. S. government bonds, some Canadian bonds and some railroad bonds may be considered suitable as investments for hospitals. Greater diversification with a minimum of risk would be obtained by the addition of some of the leading industrial and public utility bonds. Every hospital should have its list of investments reviewed periodically.

It is a trustee's first duty to preserve the capital. He cannot be expected to obtain a reasonable income with safety to the fund and also make the fund grow. Any investment is, therefore, unsuitable that risks income or sound principal value for expected rise in market value. An investment is not necessarily unsuitable which does not comply with certain statutory restrictions applied to other classes of institutions. Where a will or deed of trust to be followed and the investment is not restricted, it is a problem as to how far the trustees are justified in departing from specified legal investments. It may be helpful to quote the words of a standard authority;

> The trustees are bound to employ such prudence and such diligence in the care and management of the estate or property as men of ordinary prudence, discretion and intelligence employ in their own like affairs, not with a view to speculations but rather to the permanent disposition of their funds, considering the probable income as well as the probable safety of the capital to be invested. It is not an unlimited authority to invest the money as an ordinarily prudent man would invest his own; he must take such risks only as the ordinarily prudent man would take were he trustee of the money of others.

A great charitable trust like the Rockefeller Foundation, guided by men of the highest training and with access to the most exact information, is an instructive example of investment. The income derived is 8 per cent, but this high rate is obtained because the trustees have seen fit to change very gradually from the Standard Oil issues, of which the Foundation originally consisted. The tendency, however, as changes are made is to more conservative issues and a better balance in the securities. Reinvestments have

been largely in United States and Canadian government bonds, although substantial amounts have been put back into preferred stocks of a superior character. The peculiar circumstances and great size of the Rockefeller Foundation have evidently lead the trustees to feel justified in largely retaining even the common stocks, but the example is not one for the average hospital.

The hospital generally seems to have a small amount of money for its needs, and for that reason the greater the calamity if any loss occurs. The wise placement of a hospital's funds lies not in emulation of the Rockefeller Foundation's 8 per cent income (with occasionally some losses) but in making safety the highest factor, and income decidedly secondary.

There is no unfailing guide for the institutional investor. The list of securities legal for savings banks contain items that close analysis shows unworthy, so selection must be made. The banks themselves have accumulated their funds over long past periods and, doubtless, would not buy the same securities today. Most savings banks will be found to have more railroad bonds than would appear in a revision of their securities.

The great insurance companies furnish better guides on a whole than either hospitals, savings banks or mercantile banks. Insurance companies have expert advisers and statisticians, but even with the past few years of high interest return and the advantage of a wide field for mortgage loans, return on their investments is around 5 per cent. About 24 per cent of insurance investments are now in railroads, 34 per cent in mortgages, 19 per cent in government issues and the balance in the best of the public utility and industrial bonds and bank stocks, depending upon the location of the company and the local regulations.

It is useless in an article of this kind to go into more than a generalization on the classes of securities that may be considered suitable as investments for hospitals. Every public library is supplied with large volumes discussing investment fundamentals and how to analyze securities and determine their relative worth. There is no formula; it is a case of investigation and analysis to acquire the facts, consideration to compare and weigh, and finally selection to fit the particular need.

A hospital does not ordinarily need a bond that has a particularly active market nor a bond that is exempt from taxation, and should not pay to acquire such characteristics. Mortgages, where obtainable at a good rate on property worth twice the face of the loan, as appraised by men known to be capable and honest, make an excellent institutional investment, although requiring more care than bonds. A fair percentage of such carefully selected mortgage loans, some government bonds, some Canadian bonds, some railroad bonds would appear on the list. Greater diversification with a minimum of extra risk would be obtained by the addition of the leading industrial and public utility bonds. Mr. John Moody, the investment expert, recently wrote:

> We have come to regard public utility securities taken as a whole as the most desirable and attractive class in the investment market today. More favorably and intelligently regulated than the steam railroads; fundamentally more stable in every respect than the average industrial enterprise; the public utilities of the country face an assured future confronted by one great problem—to finance expansion of their facilities rapidly enough to take care of the steadily increasing volume of business offered to them. It is evident that the power companies represent one of the most important and most stable of the basic industries; that their future, simply on the basis of past accomplishment, is definitely assured for a considerable time to come; and that well-placed mortgage bonds of the strongest of these companies may be freely classified among the highest grade of investment securities. The New England states in particular have recognized the merits of the situation in placing such securities on their list of "legals." It is to be hoped that New York state will soon add the authority of her prestige by appropriate legislation to permit investment by savings banks and trustees in this type of security.

Traction bonds as a class, however, do not appear as desirable as power and light bonds. Bank stocks are legal investments in many places and the stocks of the trust companies and banks of the large cities have combined a good yield, comparative safety, prospects of appreciation and fair convertibility. The experience of insurance companies with their bank stock investments has been particularly favorable.

Every hospital should have its list reviewed periodically, to make sure its investments are properly diversified and that there has not been an unfavorable change in the position of some security. Such a review, if worth anything, must be a thorough analytical study of each security. The large bond houses are generally glad to help an institution in this work and furnish exact statistics without charge.

Diversification is important and often neglected. It does not mean merely owning the securities of different corporations, but their distribution over as many geographical, economic and business fields as possible. With proper diversification a higher yield can be obtained without adding to the danger. It is convenient, both for the periodic review and to be sure of diversification, to list on sheets all of the securities of a hospital with columns to the left for such classifications as public bonds, railroad, utility, industrial etc., and with columns to the right for cost, price movements and comments. As the study is made all the investment factors should be considered and trust

funds with general funds reviewed at one time and all adjusted together. If it is decided to hold temporarily some more or less doubtful security, the responsibility for watching it is well placed on one capable man. The sheets are filed and with systematic reexamination help in indicating when too great a percentage of any type of security is carried and in bringing attention to needed changes.

The practice is sometimes followed of combining different legacies in one fund, where the income is left for the general purposes of the institution. This procedure is improper from a legal standpoint and seems bad policy from a business point of view. How can an account be rendered, should the court demand it, to prove the fulfillment of the terms of a particular trust? How can it be proved that the occasional accretions of capital, to which such a fund is entitled, are preserved? A hospital should be able to prove at any time that a trust has been fulfilled and exactly carried out, in order to rebut a possible contention that a fund reverts on account of non-fulfillment. These trust legacies, no matter how small, may well be kept entirely separate and pains taken to state the fund and its terms in detail in the annual report. Families take pride in the gifts of their relatives, and the publicity is a continued suggestion inducing to the addition to existing funds or the creation of new ones, either by present gifts or by will.

THE UNIVERSITY OF COLORADO SCHOOL OF MEDICINE AND HOSPITAL AT DENVER

By MAURICE B. BISCOE, of Maurice B. Biscoe, Wm. E. Fisher and Arthur A. Fisher, Architects, Denver.

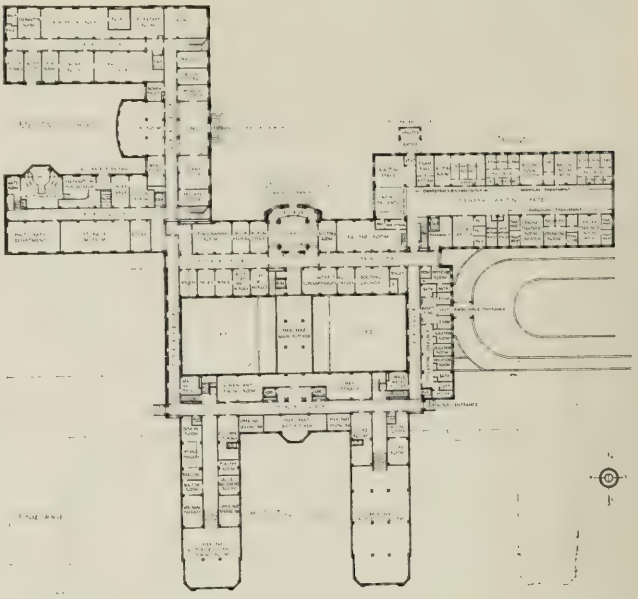
THE progress of ideas in medical education is resulting in the development of new types of plan for medical schools. The notion of a teaching hospital which is, as it were, a clinical laboratory of the school, the introduction of clinical teaching in the earlier years of the course, the recognition of the necessity for the closer relationship of the members of the clinical and laboratory faculties, the importance of clinical demonstrations of hospital cases in lecture rooms convenient to the school, the increasing instances of control of the teaching hospital by the university and the identification of the faculty of the school with the staff of the hospital, the increase in the number of full time instructors, the limitation of the numbers of students, the general abandonment of the operating amphitheater, the adoption of some principle of unit arrangement

Entrance court of new University of Colorado School of Medicine and Hospital at Denver. Buildings are now under construction

for laboratory buildings and the increasing importance of the out-patient department as a teaching and an admitting department have set before the hospital architect a new and intensely interesting problem.

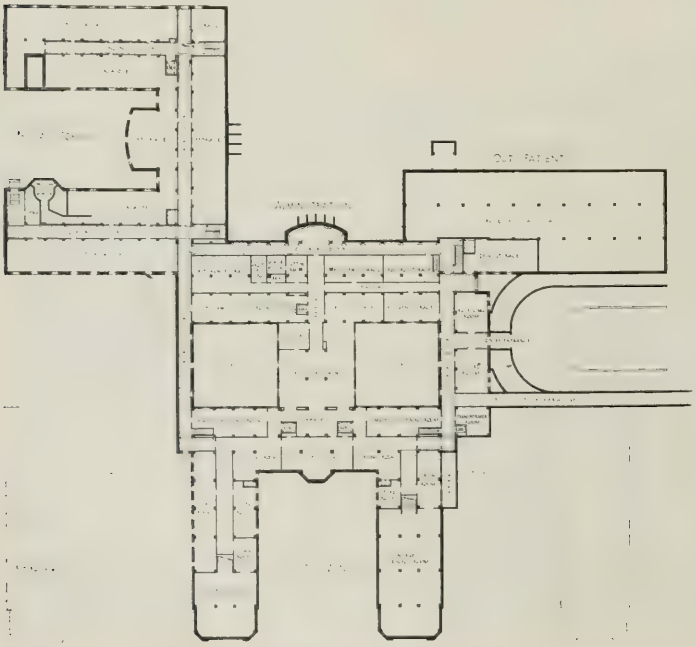
The University of Colorado, whose school of medicine is at present conducted for the first two years on the university campus at Boulder, and for the last two years at Denver, is now establishing this school for the four years' work entirely in Denver and has commenced the erection of a group of buildings comprising a general hospital, an out-patient department and a medical school in one unit, and separate buildings for a nurses' home, a psychopathic hospital, a power house and laundry.

The medical school is arranged for 200 students in classes of fifty. The lecture rooms, however, have a capacity of 100, and, by working the laboratory classes in sections, some 400 students may be accommodated.



Ground floor plan.

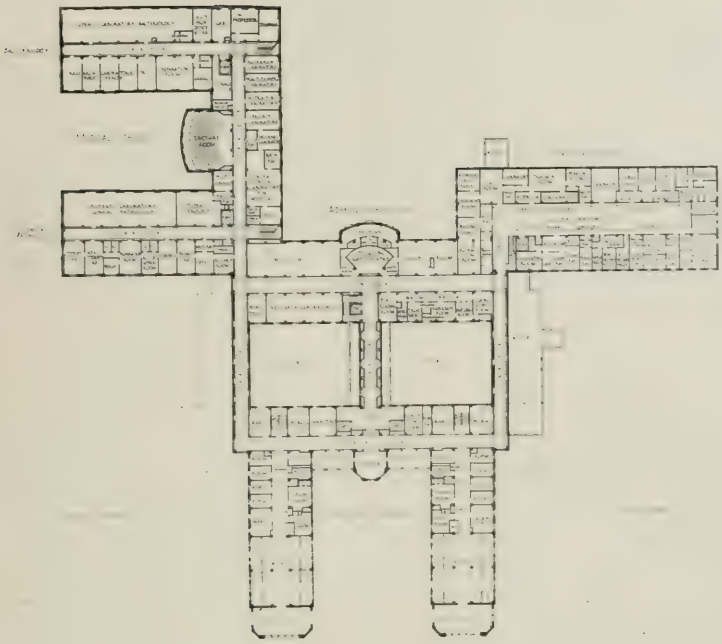
The hospital, which will be entirely a free institution without private rooms, will be, together with the Psychopathic Hospital, under the control of the regents of the University of Colorado, and the staff of the hospital and the faculty of the school will be identical.



Basement floor plan.

The site comprises a rectangle of about seventeen acres, with its long dimension running directly east and west and sloping slightly upward toward the south, located on what is now the edge of the built-up portion of the city of Denver. Within a few years the school and hospital will probably be surrounded by small houses of good character.

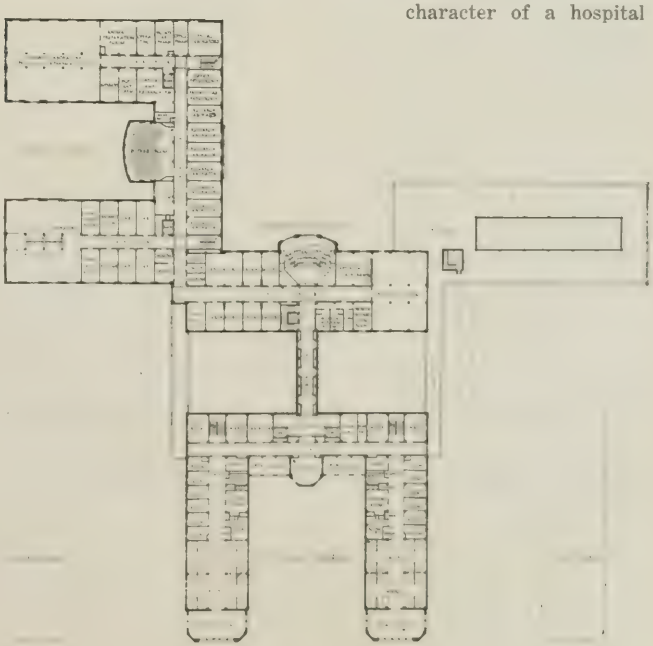
It was realized in the beginning that all knowledge of this intricate problem did not lie in the mind of one man. Opinion has been sought by the writer and freely given by many physicians, deans and hospital superintendents in all



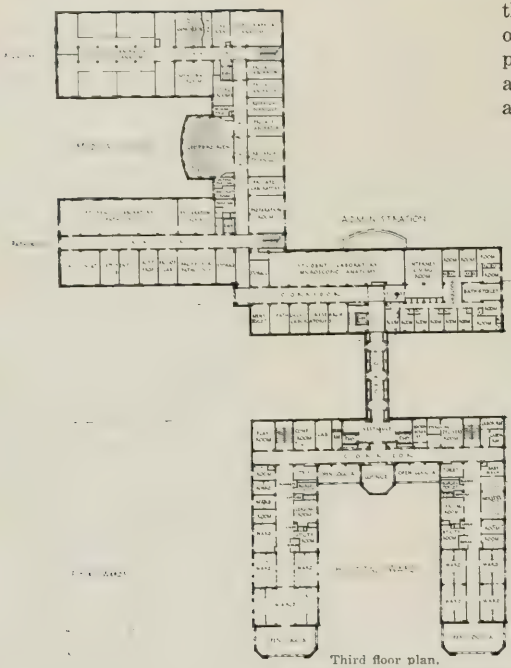
First floor plan

parts of the country and at various stages in the development of the plans. Nearly all the important medical schools and larger hospitals east of the Rocky Mountains have been visited and their virtues and faults discussed with those in charge. In this preliminary work and in the study of the requirements and relations of departments in a manner illustrated by the accompanying chart, a year was spent before definite sketches of the arrangements were made.

In the beginning a fundamental working method was established. No thought or attention was to be given to the exterior appearance of the buildings until the plans were definitely determined upon. The appearance of the buildings was to be the natural outgrowth of the requirements of the plan and the arrangements were to suffer no restriction because of a preconceived architectural effect. It was believed that when the exteriors came to be designed, that if the plan was architecturally sound, they would fall naturally into a simple and characteristic style of good mass and proportion. This proved to be the case, and a simple Georgian style was adopted as seemed to be demanded by the proportion and character of the buildings and their fenestration. In completing the exterior design an attempt has been made to accomplish a simplicity, refinement and quiet grace which might express the humanitarian character of a hospital



Second floor plan.



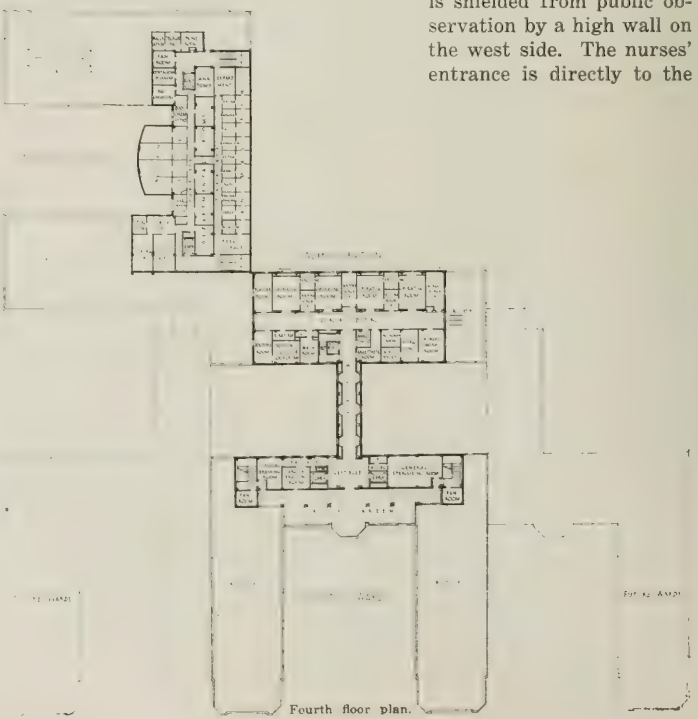
Third floor plan.

rather than imposing or monumental qualities which in the writer's mind have no place in such a structure.

A cardboard model of the hospital wards was constructed and exposed to the sun under the exact conditions which will exist in the building in its location, and observations were taken and recorded on the model of the travel of shadow over the various walls. With this data in hand the dimensions of the hospital court and the relation of the final height of the ward unit to the width of the south court were established.

In arranging the location and orientation of various sections, the direction and amount of wind which must be expected from various directions was determined from the records of the U. S. Weather Bureau and plotted as shown on the accompanying chart. By this means it was possible for example, to arrange the boiler house and laundry in such a position as to give the least annoyance by smoke or odors.

The hospital and medical school group has four general divisions. The medical school, the administration section, the out-patient department and the hospital wards. The basement is entirely given up to storage and kitchen and dining rooms. From the large north court where automobiles are parked there are entrances on the ground floor to the medical school, administration and out-patients departments. The ambulance entrance is on the easy court. The exit for the undertaker's wagon and the entrance for bringing in cadavers are in the medical school court, which is shielded from public observation by a high wall on the west side. The nurses' entrance is directly to the



Fourth floor plan.

General view of University of Colorado Medical School and Hospital, as it will appear when completed.

hospital and the goods entrance for all supplies for both school and hospital is in the basement below the ambulance entrance.

On the ground floor of the medical school are the dean's office, lobby and lounges for men and women students, locker rooms, cadaver department and morgue and autopsy room. The cadaver space is connected directly with the dissecting room on the third floor and the animal quarters on the fourth floor by an elevator which is to be used only for taking cadavers to the dissecting rooms, bringing animals to the animal quarters and removing dead animals and dissecting room waste. Such material is taken on this elevator directly to the basement, thence by special passage to the tunnel to the boiler house for cremation. It will be observed that the bodies of patients dying in the hospital may be brought to the morgue without passing other departments.

The ground floor contains also the first out-patient floor. On this floor the general record room serves the out-patient department as well as the hospital. Adjoining the admitting department is the isolation section which is readily accessible from hospital wards, out-patient department and ambulance entrance. The entrance to the nurses' and staff dining rooms is from the ground floor leaving the basement for kitchen purposes only.

The dean's offices are closely connected to the general administrative offices which are arranged in units like an office building and are capable of various divisions to meet changing requirements. Beyond the main entrance is the visitors' and doctors' elevator, connected by the central corridor with each hospital floor and reaching directly the operating department on the fourth floor. The two hospital elevators run from kitchen to roof garden and serve for hospital purposes only. On the ground floor next to these elevators are the linen and serving rooms. Soiled linen may come by chute or elevator to ground floor and then be sent to basement by lift and by tunnel to laundry.

On the first floor of the medical school are the departments of bacteriology and clinical pathology and a common lecture room. The general hospital clinical laboratory is in direct connection to hospital and with the department of clinical pathology. On this level is the second story of the out-patient building. The x-ray suite is located between the out-patient department and hospital wards, and within easy reach of the doctors' entrance and lounge on the floor below. The clinical amphitheater is placed over the main entrance where patients may be readily brought from hospital wards or out-patient department. Students enter it from the medical school (on the floor above), and it is flanked by the museum and the library stacks for the convenient assembling of specimens, books, slides or charts, and is provided with a stereopticon and moving picture booth.

Ward Plan is Flexible

Because of the variation of opinion in regard to large or small wards, and of the probability of future change in opinion in this regard, the hospital wards are arranged in such a way that they may be divided into wards of various sizes from one to sixteen beds. At present the plan is to arrange beside the small wards and quiet rooms a ward of sixteen beds divided by glazed screens into two eight-bed wards, the beds therein being separated by glass screens and so placed as not to face the light. It will be noticed that different subdivisions are used on the various floors for the different services.

On the second floor are the departments of physiology, pharmacology and biochemistry with a common lecture room, the library reading room and the students' entrance to the clinical amphitheater.

On the third floor are the department of anatomy, both gross and microscopic, the department of pathology, and the interns' living quarters. The children's wards and the maternity department

are on this floor. There are to be at present three floors of hospital wards accommodating 150 patients. In the near future it is planned to add three more stories of wards on top of the present structures, making the capacity 300 beds. By the addition of the future wards to the east and west the capacity may be increased to 600 beds. On the fourth floor of the medical school are the animal quarters, and animal operating rooms, the dog runs being surrounded by a twelve-foot wall to confine the sound.

Operating Department on Top Floor

The operating department occupies the fourth floor of the administration section, with close connection by stair with the department of pathology on the floor below. A general gauze sterilizing room for the whole hospital and two surgical dressing rooms are provided on this floor under the control of the operating room staff.

It is intended in the future to complete the section between the medical school and the hospital to the west of the west-connecting corridor for use as additional research rooms, which would thus be convenient both for chemical and laboratory men.

The main kitchen is in the basement and is lighted overhead and at the sides and ventilated by large flues on either side of the central

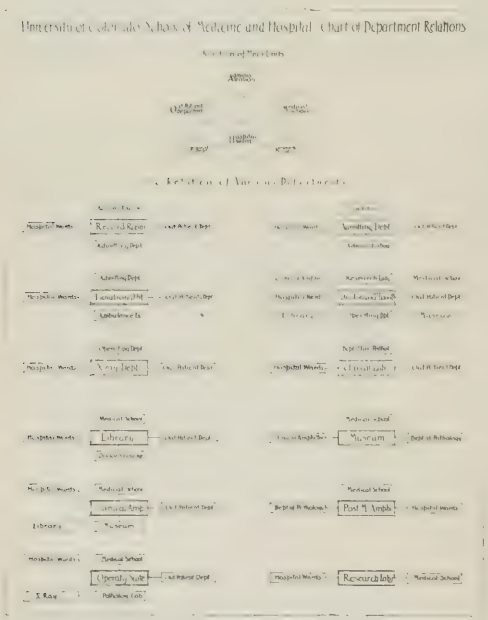
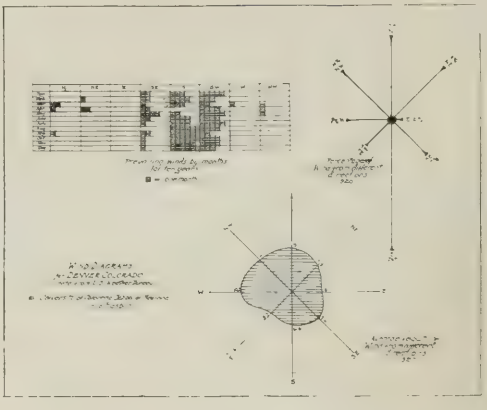


Chart of department relations at University of Colorado Medical School and Hospital



Wind diagrams for Denver, on which were based the location for power house and laundry so as to avoid as much of the smoke and odors as possible.

corridor. Food is served on the dumb waiter direct from the main serving rooms to the ward serving rooms. All dish washing is done in the central space provided next the kitchen.

Having in mind the inevitable future progress in medical science and the resulting changes in instruction methods, the entire medical school is built on a unit system, a laboratory 12x21 feet being the unit adopted. Each unit, being provided with facilities for connections for gas, electricity (D.C. and A.C.), steam, hot and cold water, compressed air and vacuum, any section or number of sections may be used for any laboratory purpose without structural changes. The partitions are set on top of the finished concrete floor and may be moved without patching the floor. The medical school unit is arranged so that it may be enlarged to twice its present size, as also may be the out-patient department.

The out-patient department has been designed on the principle of merging all waiting rooms into one general waiting space twenty feet wide with large windows at both ends, glazed transoms from a height of seven feet to the ceiling along the entire length of the walls between the waiting space and the clinics, and exhaust ventilating in addition. The clinic windows are provided with transom ventilation similar to that used in the hospital. In the medical clinic the rooms marked "Waiting Room" are really consultation rooms. Lamson carriers are to be provided for transportation of records from record room to clinics.

The museum on the first floor is for selected specimens for the instruction of students and exhibition to doctors. Adjoining the post-mortem rooms in the ground floor is a storage museum for duplicate specimens.

TEAM WORK FOR BETTER COMMUNITIES

By ELWOOD STREET, Director, Community Council and Community Fund, St. Louis, Mo.

The first of a group of three articles evaluating the Community Chest is presented in Mr. Elwood Street's discussion of community organization of social work. Mr. Street is director of the Community Council and Community Fund of St. Louis and believes that financial cooperation, as expressed in the community chest, is without point unless the community has also some means for social cooperation. Some 125 American cities are now conducting their welfare work on a cooperative basis, and since hospitals share largely in any such community enterprise it is fitting that some study be made of the advantages and disadvantages of this growing form of collective philanthropic activity.

THERE has been no more striking development in charitable and philanthropic work in the United States during the last fifteen years than the increasing prominence of that movement known as a "Community Organization" movement, which is variously expressed in financial federations, community chests, welfare federations, community councils and central councils of social agencies. The field of social work in this period has seen as striking a swing from individualism to collectivism as has been observed in the same period in the development of the corporate type of industry.

At the present time, somewhere around 125 American cities have in some way or another adopted this general plan of coordinating their social forces, and it now looks as if within the next few years, there would not be any city of any size in this country which would not be conducting its organized welfare work on this cooperative basis. The movement promises to transform both social work and community life.

In this way, some degree of order is coming out of the chaos which in past years has been bewildering to the average citizen, detrimental to social agencies themselves and subversive of the best interests of the communities in which these agencies existed.

Formerly Charities Were Unrelated

For, under the old state of affairs which has existed for the last 2,000 years or so, the charities of our cities were absolutely unrelated to each other. They were established to meet various social and charitable needs, in response to various personal ambitions or emotions and with the urge of various religious beliefs. They had diverse historical backgrounds and were supported by people in diverse strata of society. In general, these charities neither knew each other or cared to know each other. The result was confusion, duplication of work, failure to render service which should have been required, and inefficiency in conducting work or collecting funds for that work. As the number of these charities grew in response to the growing complexity of life in our cities and in response further to a growing understanding of the manifold causes of poverty, disease, vice and crime, this situation became increasingly painful.

At about the same time two different groups become aware of the situation and began to consider applying some sort of remedy.

The first of these groups was the contributor group. Givers began to consider the possibility of some way out of the welter of conflicting appeals for funds, merely as a protection to themselves. Social workers, who were becoming members of a profession growing in numbers and in standards of professional service, also began to see that these social agencies were all engaged on problems which had about the same basic causes and that some sort of cooperation must be worked out if any of these agencies were to do its work effectively.

As a result, two divergent but more or less correlated movements developed; the first, for remedying financial abuses, and the second for remedying social abuses inherent in the old system or, rather, lack of system.

Cleveland First in Financial Cooperation

The movement for financial correction really began in Cleveland where, about the year 1900, the Chamber of Commerce established a Committee on Benevolent Association, which studied the methods of the charities and philanthropies of the city and issued endorsement cards to those which seemed to be doing a reasonably important work in a more or less effective way. This committee, in the years 1907 and 1909, made a study of giving in Cleveland and found that in those two years, while the amount given had increased 22 per cent, the number of givers had decreased 11 per cent. In other words, the burden of charity was becoming heavier and heavier on fewer and fewer people. This committee had in mind the successful experience of the Jewish charities

which had federated in several cities, including Cleveland, and conceived the idea that a wider type of financial federation might be evolved whereby separate appeals of the member organizations could be replaced by one combined appeal.

Cleveland's experiment was successful and its pioneer work was rewarded by the establishment of organizations of the same general sort in an increasing number of cities.

Many Are Continuations of War Chests

The World War brought about the adoption of this principle of joint financing for war-time and peace-time agencies by one combined campaign. As a result, so-called "war chests" were organized in over 500 American cities. Nearly 125 of these cities have salvaged the remains of their war chests and made out of them community chests or community funds which are raising collectively the contributions for greater or lesser numbers of the agencies in their communities.

Financial cooperation, however, is only one of the forms which the so-called community organization movement is developing. Those who have most actively approved the establishment of joint financial plans are agreed that without some means for social cooperation as well, financial cooperation will be without point.

As a result, the second of the types of cooperative movements which were developed to meet the abuses of miscellaneous and unrelated social work is coming into increasing prominence as a necessary part of community organization. The social workers, who saw that social work must be cooperative and that social agencies must work together, although developing their ideas along different lines from the givers who had first of all the financial point of view, have come to about the same place. The result is that many cities which have not yet developed community chests or joint financing of their charities have established nonfinancial federations which go variously by the names of community councils and councils of social agencies. Although lacking in financial powers, these councils have been able by the power of facts and public opinion to bring about greatly increased cooperation between their member organizations to eliminate duplicated effort, to establish higher standards of service, to effect the consolidation of certain agencies where duplicate overhead was unnecessary, and to instigate the creation of new organizations or the extension of existing agencies to serve fields which have been neglected. Although these councils have not had financial power, they perhaps have been built more firmly because they were able only to proceed by the force of correct social principles. In other words, they have had to educate the various social agencies of their cities up to the point of requiring the standards of social service which they have attained, and it is self-evident that once a person or social agency has been educated, it is hard to uneducate him.

The trend of the movement in the future seems to indicate clearly that while financial federation always will be conspicuous because it touches the pocketbooks of our citizens and because Americans are accustomed to think in terms of dollars, it is still more important to have social cooperation, either through combining these functions in one organization or through having two separate coordinated agencies: one for joint financing and one for promoting cooperation between the social agencies of the city. This last plan is not satisfactory for it may mean divided leadership. The ideal plan seems to be to have in each city of any size, one community federation which will carry on a great many activities for its member organizations, which should include all public or private, social, civic or charitable agencies doing a reasonably reputable work.

Social Cooperation Most Important

One of these cooperative activities will be the joint collection of funds for those member organizations which wish to engage in such cooperative effort. Financial activity, however, will be supplemented by perhaps a dozen or fifteen cooperative activities, such as central purchasing bureaus, social service exchanges, central publicity departments, central personnel departments and departments for united discussion and action on such social problems as the care of needy families in their homes, child welfare, social hygiene, mental hygiene, delinquency, homes for the aged, Americanization, recreation, and so on through the list of the activities which command the interest of various groups of member organizations. If such functional organization is developed, financial federation will take its proper place as only one of the many processes by which our social agencies may be brought into their right relationship to our community and to each other. If such a functional federation or community council realizes further its responsibility to carry on a continual educational campaign on the problems which these agencies face and on the responsibility of all citizens to cooperate in meeting these problems, the federation or council will be completely rounding out its usefulness. A city which is so fortunate as to have a community organization of this sort is becoming, in increasing measure, a better place for all its people to live, to work and to play.

THE AMERICAN HOSPITAL IN PARIS

By ROSWELL T. PETTIT, M.D., Director, Illinois Valley Hospital, Ottawa, Ill.

THE establishment of an American Hospital in Europe might seem to the casual American a case of carrying coals to Newcastle, but the analogy does not hold with one familiar with the hospital situation in Europe.

Hospitals were originally almshouses, places for the destitute poor, and from this beginning the hospital of today has gradually developed. In America, the hospital is patronized by all classes of society and is recognized as the proper place for the seriously sick, regardless of class or position.

Not so in Europe. There the hospital is still an almshouse. While Paris can boast of wonderful advantages for study offered by her great hospitals, the buildings for the most part are old; the plumbing is inadequate; the patients are crowded together in great wards; the food is poor; and nursing service inferior. The people of Paris who can pay do not go to hospitals; they are either cared for at home or go to one of a number of private clinics or sanatoriums where usually the rates are excessively high. There is no middle ground.

The American resident of Paris or the tourist would be no more willing to accept what is offered by the great charity hospitals than the Parisian in like circumstances, and many are unable to pay the high fees of the private sanatoriums. Beside all this there is nothing more distressing or tragic than to be seriously ill away from home and in a hotel. It is bad enough to be sick in a hotel anywhere, but to be ill in a foreign country and to require an urgent operation or to develop typhoid, pneumonia or some other serious illness is a calamity.

Seeing the great need for an American Hospital, Dr. Magum and Mr. Van Bergen, American residents of Paris, in 1904 conceived the idea of founding a hospital in Paris to be run by Americans and to serve Americans of all classes. The first board of governors, under the presidency of Mr. John H. Harjes, started a hospital of twenty-four beds in April, 1910.

The present hospital has a capacity of thirty-five beds. All Americans are received; there are private suites at varying prices for those who are able to pay, and small comfortable wards for those unable to pay. All patients receive the same food, nursing and professional care. It is located at Neuilly-sur-Seine, just beyond the gates of Paris, and the illustrations give an idea of the present buildings and grounds.

The present American Hospital in Paris is an institution of thirty-five beds. A new 100 bed institution is being erected and a campaign is being carried on in this country and abroad for five million francs to complete and equip the new buildings.

Everyone in America is familiar with the work

These nine little United States citizens have yet to see their own country. Their mothers are patients at the American Hospital in Paris.

of the American Ambulance, which work was carried on by the Ambulance Committee of the American Hospital, during the war both before and during the American participation. With the return to peace, with renewed and increased ocean travel, the small hospital of thirty-five beds is entirely inadequate to meet present and future demands.

To Erect 100-Bed Building

Plans have been drawn, additional ground purchased and construction begun of a modern 100-bed hospital. The present hospital is supported entirely by voluntary contributions and from patients' fees. In February, 1920 the American Committee of the American Ambulance Hospital through its chairman, Mrs. Robert Bacon, contributed to the American Hospital of Paris the funds remaining from war work as an endowment for the maintenance of twenty free beds in the new hospital. Toward the construction of the hospital, Mr. Henry P. Davison and friends contributed $175,000. Since that time other funds have been contributed toward the building and equipment.

These contributions will make it possible to construct the necessary buildings in 1923, but an additional five million francs will be required to complete and equip these new buildings in 1923 and 1924.

In planning the new American Hospital of Paris constant thought has been given to future growth of the hospital and its work. There are 10,000 permanent American residents in Paris today; thousands of American students reside in Paris and the nearby European cities; and it is hard to estimate the number of tourists in Europe during the summers. This hospital is the one place in all Europe where these people will be able to get medical care according to American standards.

The new hospital will be a four-story brick building with four ten-bed wards and sixty private rooms. All rooms and wards are planned to

An enclosed sun room for convalescents and the men's ward at the American Hospital in Paris.

face the garden. The building will be soundproof; its interior decoration will be so planned as to sacrifice nothing in the way of cleanliness and sanitation, but an effort will be made to avoid the chilliness of dead white walls and marble corridors. Mechanical ventilation is to be used only in service rooms, laboratories, and operating suites. Sterilization is to be centralized.

In constructing this hospital, it has to be remembered that it must meet the requirements of Americans in a foreign country, that, while provision is made for free beds, generous provision must also be made for pay patients as represented by that class of Americans of sufficient means and leisure to afford foreign travel, and that construction must be carried out under the handicap of foreign conditions of labor and material.

THE STATE HOSPITAL'S ISOLATION*

Because of its demands for large acreage, many state hospitals may not overcome their physical isolation from the community, but their professional isolation, which is the greatest handicap in their development, must be broken down. Political exploitation is made easy by the state hospital's isolation, and under cover of solitude unscrupulous politicians have been known to carry through their designs undetected. When the superintendent and his staff establish themselves in the professional, business, social and civic world about them, the state hospital ceases to be a place of mystery, and when the average citizen is made acquainted with the institution, its repulsive elements begin to disappear.

ISOLATION has been an outstanding handicap in the development of the state hospital for nervous and mental diseases. It has been and still is responsible for much of the scandal which arises concerning the state hospital and for nearly all of the popular ignorance of the institution's work and of its possibilities as an agent of humanity. Any campaign for the elevation of its standards or the improvement of its service must expect to encounter the obstacle of isolation.

The general hospital, big or little, is located in the midst of things; it is an open book to the community; its doors and wards each day are free to inspection. Its sick are rational; they are temporary residents; they go out to relate their experiences and impressions within; their friends visit them at will at the bedside. The staff is made up of well-known citizens in whom there is public confidence. Financial support for the institution is derived from the resources of the community.

The general hospital is not invested with superstition or mystery. Its management keeps in touch with the medical, surgical, clinical, nursing and educational world through professional publications, conferences and associations. Emulation and competition are continually at work among medical men and employes. Each year one or more recent medical school graduates and interns from metropolitan hospitals begin practice, bringing with them fresh thoughts and ideas. In most instances the public finds it comparatively easy to impress its sentiments upon the general hospital, and hospital authorities as a rule are extremely sensitive to local opinion and feeling. If for no other reason, its dependence upon the public for support makes it exceedingly careful to keep four-square and up-to-date.

These factors are not present within or without the state hospital. The hospital for mental diseases is the creature of the state, supported by the taxes of the people and administered by officers selected by some governmental agency. It is possible for it to change its policy and its personnel with each political shift at the state capital. For years in a large number of states and, even now, in a few of them, this very thing happens.

The state hospital's very location probably was fixed to appease a political group. Superintendent and employes, selected on account of political or personal affiliations, know their tenure is uncertain, and they feel a responsibility to political friends. It is not surprising that, under such conditions, the incentive to think, to create, to build up, to infuse new ideas and new ideals into the service is lacking. Isolation has tended to make easy this exploitation of a state institution for political benefits.

Professional Isolation Avoidable

The state hospital is a tremendous enterprise. Rarely does it house less than 1,200 patients and 300 employes. Often it demands large acreage for farms, dairies, orchards, gardens, parks and lawns. The nature of the diseases which it treats

*This is the second of a series of articles on state institutions for the mentally ill which is being prepared under the direction of a special committee of the editorial board of The Modern Hospital, in cooperation with the National Committee for Mental Hygiene and Mr. A. L. Bowen, former superintendent of charities of the department of public welfare of the state of Illinois.

and its demands for expansive tracts of land in many cases make advisable its location at a distance from large centers of population. So far as it is a physical detachment, its isolation may not always be changed; in all cases it cannot be moved into the midst of things.

The professional isolation of the state institution from the hospital, medical and social world has been due to two causes. Until recently it was known as an asylum, with a function purely custodial. It then had few medical aspects to identify it professionally. After the hospital idea dawned, it was long before the old institution took on any new phases, except that of name. The medical world, from education to practice, did not welcome it nor did it seek communion; there is yet in many states a regrettable gulf between the state hospital staff man and the medical practitioner in the free community.

The second cause for this professional detachment is the difference in the character and residence of the institution's patient population. Many patients are permanent residents, and active medical service has been very limited. The hospital's mental and nervous field has been restricted to the acute mental wards, or the receiving wards. This is due to the fact that the medical staff is woefully undermined so that its members have altogether too much to do. It takes all of his day merely to get through his routine. As a consequence his initiative is killed. In following this policy states are penny wise and pound foolish and largely waste their capital outlay.

"Breaking the Ice" in the Community

The remedy for this situation is being found in not a few places. It consists in "breaking the ice" in the district in which the hospital is located. The superintendent and his staff, for example, join the city or county medical society and attend its meetings. They join the Rotary or other civic clubs where they are asked to speak upon the subjects which concern them. Their specialty soon comes to the surface in the medical society meeting and the society is invited to the institution and shown through all departments. Later comes the establishment of clinics for patients on parole in the cities of the district and for others who feel the need for advice and assistance. General practitioners are encouraged to call upon the state hospital for consultation on doubtful cases in private practice and the staff gives it willingly. The nurses' training school in the state hospital affiliates with the local and state nurses' organizations. Then all the state hospitals unite in a state medical association with semi-annual meetings, where interest is heightened and experiences compared. Such an organization is bound to attract the attention of the state medical society. Under such a development as this the barriers soon begin to melt away.

The state hospital also should be represented in the organizations of occupational therapists, nurses, agriculturalists; in fact, in every activity in which the local community or the state may be participating. Thus the state hospial may leave its isolation and in the affairs of man become a factor. All this has been done; it is practical and feasible and one hundred per cent of theory will work out in practice.

Getting on Terms With Average Citizen

While the state hospital is establishing itself in the professional, business, social and civic world, it is very likely to recognize that it has been detached, without good cause, from its patients, their friends and relatives and the general public. The general hospital is understood by the average citizen. He knows the schools and other public agencies which touch him and his. Why should he not know the state hospital as he is coming to know the general hospital? It should not, of course, cater to the morbidly curious; but when insanity is properly understood and the state hospital is no longer a place of superstitious mystery, the morbidity with which insanity, so-called, has been regarded will no longer perplex.

As the institution opens itself up to the public gaze those elements in it which are repulsive will begin to disappear, for only when state legislatures are forced by public opinion to make appropriations which will enable the superintendents of these institutions to employ adequate staffs will the state hospitals have that order, cleanliness, discipline and approach to normal life which most of the conscientious superintendents strive to attain. When the public sees what should not be then legislatures bestir themselves to eradicate it and often succeed admirably.

Occupational therapy takes on a new meaning as it develops. The "O. T." center becomes a place of which everybody is proud. Women's clubs of the district come in to see what is being accomplished. Employment in the industries is stimulated and the institution sees new avenues in which men and women patients may be occupied to their own and the institution's advantage.

Then comes the county farm bureau and holds some of its meetings at the farm center. The agricultural activities of the institution feel a new impulse. The community ventures upon the institution park to hold its public assemblages. By degrees the number of patients permitted to enjoy

them increases. Old practices, traditions and fears fall away and depart. Service on the staff becomes a joy in the presence of constructive results. Vision widens and imagination is tempted into fields that, a short time before, appeared closed and barred.

With Acquaintance, Superstition Disappears

Inside and out it becomes evident that the service of a state hospital is no better than the service it gives to the poorest, the most difficult, most forlorn and most abandoned. This is a good index by which to measure its usefulness. When the public sees and knows of its own eyes, then superstition is no more. The state hospital becomes what it should be, a rational place of treatment and care for those who have suffered a nervous or mental disease, where they are insured during their whole residence, whether it be long or short, of every opportunity that scientific and human skill can devise for their improvement and recovery. In its realm, the state hospital should be as completely equipped, as modernly administered, as professionally alert and as freely accessible as the best of the general hospitals that treat physical diseases.

When the state hospital reaches this stage, its isolation will have been overcome. The public will regard it with the same interest, the same sympathy, the same confidence that it regards its general hospital.

IOWA SANATORIUM HEADS MEET

The Iowa Sanatorium Association met at the Montrose Hotel, Cedar Rapids, on February 15, 1923, in conjunction with the conference of the Iowa Tuberculosis Association. Those present were: Drs. H. V. Scarborough, Cunningham, and Blenhardt of the State Sanatorium, Oakdale; Dr. John Peck and Miss Ellen Standing, superintendent, Sunnyslope Sanatorium, Ottumwa; Miss Ethel Cross, superintendent, Pine Knoll Sanatorium; Dr. Kime of Boulder Lodge; Dr. F. E. Sampson of Creston; Dr. J. C. Painter and Miss Garrison of Dubuque.

The program consisted in a discussion of the use of the x-ray in the sanatorium, the creation of a county welfare board with executive powers and a consideration of the nursing problem of the tuberculosis sanatorium. The next meeting will be held in conjunction with the state medical meeting at Ottumwa in May.

DR. WACHSMANN AT SYDENHAM

Dr. S. Wachsmann, former medical director of Montefiore Hospital, New York, has accepted the position of medical director and superintendent of the new Syndenham Hospital, New York. This institution is now appealing for funds for a new and modern building to be erected at Manhattan avenue and 123d street, facing Hancock Square. In planning the new eight-story building, Charles B. Meyers is acting as architect under the direction of Dr. Wachsmann and with Dr. S. S. Goldwater as hospital consultant.

PLAN FOR LARGEST "HOSPITAL DAY"

Hospitals in Ontario, British Columbia, South Carolina, Florida and Missouri are among those which early asked the National Hospital Day Committee for suggestions for a program for third National Hospital Day, May 12, or which have submitted new ideas for the observance of this day.

The numerous requests received from hospitals in different parts of the country for suggestions for a program have made it advisable for the National Hospital Day Committee, 537 S. Dearborn St., Chicago, of which Matthew O. Foley in executive secretary, to prepare suggestions and ideas at once, and leaflets containing these suggestions are available to every hospital.

In view of the fact that 1,500 hospitals observed the first National Hospital Day in 1921 and nearly 3,000 last year, the National Hospital Day Committee expects that a majority of the institutions throughout the United States and Canada will have a program this year.

The National Hospital Day Committee is composed of fifteen leading hospital and nursing executives of the United States and Canada and is headed by E. S. Gilmore, superintendent, Wesley Memorial Hospital, Chicago, as chairman. Dr. M. T. MacEachern, president-elect of the American Hospital Association, is vice chairman. The Rev. P. J. Mahan, acting vice president of the Catholic Hospital Association, Dr. Hugh S. Cumming, surgeon general of the U. S. Public Health Service, Asa S. Bacon, president of the American Hospital Association, and Miss Mary C. Wheeler, superintendent of the Illinois Training School for Nurses, are among other members of the committee which will be glad to assist all hospitals in any way interested in this movement to improve the relations between the institution and its community.

TO OBSERVE NEGRO HEALTH WEEK

National Negro Health Week will be celebrated from April 1 to 7, and all organizations and persons interested and active in the work are specially urged to get in touch with the vast majority of Negroes who have not yet learned of the health work done and the great benefits brought about to self, home and community by the community gatherings of the week.

During the week the steady decrease in the Negro death rate discussed last year will again be emphasized. Statistics show that in Maryland and North Carolina, the only two southern states in which the records go back for ten years, the Negro death rate decreased 7.8 and 32.8 per cent respectively; and that in Kentucky and Virginia, in which the records go back for only five years, the rate decreased 11.8 and 11.1 per cent respectively. In other southern states these records do not go back as much as five years.

These figures seem to indicate that American Negroes are not necessarily short lived nor especially liable to disease and that their death rate is largely due to their comparative poverty. The point is made that better hygienic conditions would reduce the rate of both sickness and death and do away with much of the industrial loss caused to employers by absenteeism.

Health Week will be conducted by Dr. R. R. Moten, principal of Tuskegee Institute, under the auspices of the Annual Tuskegee Negro Conference and the National Negro Business League, with the cooperation of many other organizations. The U. S. Public Health Service, which is among those cooperating, is publishing in connection with the week, a "year round" health program, which will be widely distributed.

TRUMBULL HOSPITAL AT BROOKLINE, MASS.

By HAROLD FIELD KELLOGG, Architect, Boston, Mass.

TRUMBULL Hospital, a new fifty-two bed hospital recently opened in Brookline, Mass., is the first of a series of similar institutions contemplated by the Hospital Corporation of Boston. It has been designed with the idea of meeting the constantly increasing demand for better and more comfortable accommodation than the municipal or semi-public hospital can give. It is planned to accommodate surgical cases largely, and special attention has been given to the x-ray and electric treatment department to be used in conjunction with surgery.

The hospital is operated under a business administration with an organization composed of a general manager, superintendent, assistant superintendent, night supervisor, matron dietitian, and operating room supervisor in charge of various departments. Graduate nurses are employed mostly but a few student nurses, furnished through an affiliation with another hospital, are used. It is an open staff institution but has an advisory board of five prominent Boston surgeons who assist the management in every way possible.

Porches on Three Sides of Building

The exterior of the building is modified colonial design of Harvard brick and limestone trimmings. There are east, south and west porches on both first and second floors, giving plenty of space for patients to be out of doors.

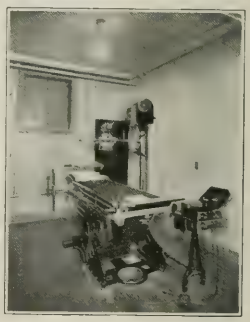
The basement of the building, which by the nature of the lot is wholly out of ground at the east end, contains the general offices, x-ray establishment, laboratory, laundry, kitchen, boiler room, locker room, dining rooms for staff, nurses and employes, and a rest room for nurses when off duty.

A home-like atmosphere has been given the waiting room at Trumbull Hospital.

The main entrance of the hospital, through which patients and patients' friends enter, is on the south side of the building and opens into the first floor. The reception room on this floor is designed to give a comfortable homelike effect, as far removed from the hospital atmosphere as possible. This floor is given over mostly to private rooms furnished with the most modern equipment for the comfort and convenience of the patients. There is also on this floor a twelve bed ward; it is in the north wing with light and air on three sides.

Operating Rooms Have Unique Lighting

The second floor, like the first, is largely given over to private rooms. The operating suite, which is in the north wing, consists of two large operating rooms and one small one, a sterilizing, ether and recovery room, and doctors' rest and locker rooms. These are all grouped around a central octagon so that the service is intercommunicating. In the center of this octagon there are four elbow-action scrub sinks back to back against a low wall approximately 2 feet wide, 5 feet long and 4 feet high. This conceals all the plumbing, which is made easily accessible by means of cupboard doors. The three operating rooms have double windows, indirect ventilation through cloth-filtered air from the basement, and indirect lighting for nights.

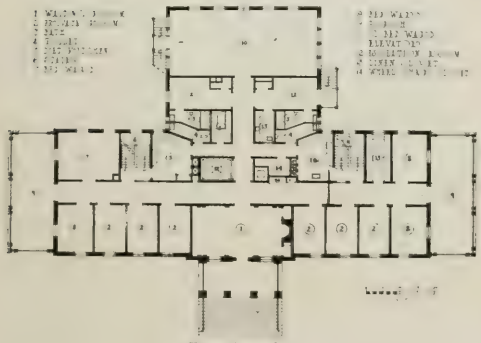


The hospital's x-ray equipment is quite complete.

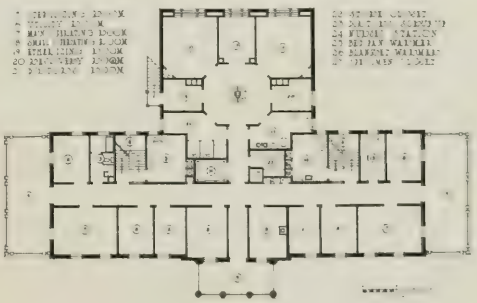
This lighting is one of the unique features of this hospital. It is accomplished by two 500 candle-power lamps and twelve mirrors so arranged that the walls and ceilings, which have been specially designed, are all equally illuminated. It gives a light which reads by meter approximately as great as north daylight and is absolutely without shadow as the photograph on the following page shows.

The x-ray department is equipped for any re-

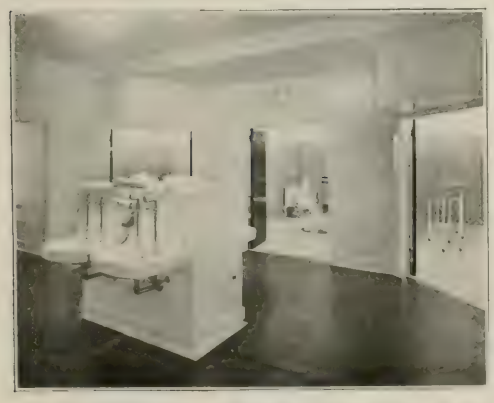
General exterior view of Trumbull Hospital, Brookline, Mass.



First floor plan.



Second floor plan



Operating rooms, one of which is shown at the right, are grouped around a central octagon (left)

quirement in the science of roentgenology, having separate divisions for diagnostic and therapeutic work.

The diagnostic unit is a model of the "trolleyless" type and is amply protected so that neither operator or patient can be exposed to electrical shock.

Therapy equipment consists of one of the 225,000 volt treatment units, capable of current adjustment, both for the treatment of deep-seated cancer and for superficial skin therapy. The newer method of rectification by means of kenotrons immersed in oil is used, rendering the machine noiseless.

The hospital was one of the first in New England to be equipped with the deep therapy plant, and no expense was spared on the equipment and installation. The department is under the supervision of Dr. Herman A. Osgood of Boston, roentgenologist.

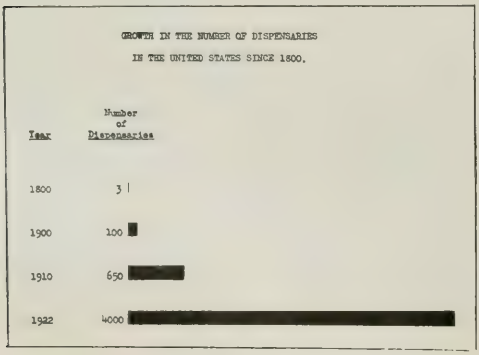
THE BOOM IN DISPENSARY WORK

By MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund, New York.

IN AUGUST 1914, The Modern Hospital published an article under the above title, pointing out on the basis of facts collected by the United States census bureau the remarkable growth of dispensaries in the United States during the first decade of the twentieth century. From a report of the federal census bureau, supplemented by additional data, this article estimated that in 1910, there were about 650 dispensaries of all kinds in the United States. The actual number of dispensaries listed by the census bureau in 1910 was found to be 574, an increase of nearly 300 per cent over a total of 156 named in a report by the census bureau only six years before, 1904.

At the present date, eight years later, it is possible again to point to a further and still more remarkable increase in the growth of dispensaries in the United States; for between 1914 and 1922 the number of dispensaries about which data have been collected reaches a total of 3,294, and it is estimated that the probable number in existence, allowing for those from whom reports have not yet been received, is over 4,000, an increase of over 600 per cent in eight years.

Dispensaries began in the United States in 1786. In 1800 there were three in the country; in 1900, about 100; in 1910, as before estimated, about 650; in 1922, about 4,000.



Material on this subject was collected for a number of years by the committee on out-patient work of the American Hospital Association, which devoted its time and attention to general dispensaries. Special lists have been prepared and from time to time published by the National Tuberculosis Association, the Committee on Mental Hygiene, the Children's Bureau, the United States Public Health Service, and others dealing with various types of special clinics.

On the basis of this information, plus additional special surveys, the American Medical Association[1] issued last autumn a summary of the number and types of dispensaries in the United States, including a classified list of a large number of the institutions.

It was the use of the out-patient department for the development of medical education which, in the latter part of the nineteenth century, gave the first main impetus to the dispensary. But this influence has in recent years affected more the quality of the service than the number of new institutions. The tendency of medicine towards specialization, the high cost of diagnosis and particularly of specialists' services, and the growing attention of the public to the care of health, have all served to develop the out-patient department as a means of furnishing medical care, particularly in the specialties, to persons of limited means. These forces have brought many general hospitals to establish out-patient departments, and many other organizations to assist financially in the establishment of out-patient clinics for the service of the community.

The influence, however, which has led to the establishment of the largest number of dispensaries has been the public health movement. Beginning

[1] Journal A. M. A. Dispensary Service in the United States, Vol 79, No. 6, August 5, 1922.

with the attack upon tuberculosis, which took national shape early in the twentieth century, the modern public health movement has dealt with such large problems as the prevention of infant mortality, the promotion of the health of school children, the development of clinics for prenatal and obstetrical care, the control and treatment of venereal diseases, the proper facilities for dental hygiene and dental service, of opportunities for consultation with psychiatrists (mental hygiene clinics), and of clinics in industry established for the care or prevention of diseases or accidents among employes. About 3,000 clinics, mostly unattached to hospitals, have resulted from one or another of the health movements indicated in the preceding list. A table[2] showing the number and chief types of dispensary work, taken from the report of the American Medical Association, may be reprinted here, with appreciation of the important service rendered by the association through its study and publication of these data:

NUMBER AND CLASSIFICATION OF DISPENSARIES IN THE UNITED STATES

General dispensaries		948
Special dispensaries:		
Tuberculosis	667	
Venereal disease	487	
Mental hygiene	260	
Baby and child hygiene	566	
Out-patient departments of eye, ear, nose and throat hospitals	37	
Out-patient offices and stations of the United States Public Health Service	119	
Out-patient departments of orthopedic hospitals	16	
Miscellaneous	53	
		2,205
		3,153
Industrial (enumeration not completed)		92
Total dispensaries known		3,245

While only a certain proportion of the dispensaries furnish statistics of the amount of work done, it is to be estimated on the basis of the figures that are given, that some 30,000,000 visits are made by patients to the dispensaries in the United States a year. The number of different individuals cannot be estimated as accurately, but is probably about 7,000,000 persons, allowing for duplications.

The distribution of dispensaries throughout the country follows the line of concentration of population, the older and industrial states, and the larger cities having the largest number. Approximately one-third of dispensary work, as measured by the number of visits, is in the fifty largest cities of the country.

The figures collected by the American Medical Association show that of 615 general and special hospitals, which have been approved for internships (excluding institutions for the insane), 426 or 70 per cent have out-patient departments. One hundred and sixty-five dispensaries are recorded as including in their work the teaching of undergraduate medical students.

Teaching Dispensaries Small Part of Service

It is important to bear in mind that while the teaching dispensary is of the greatest importance from the standpoint of medical education, from the standpoint of the community it fills only a small part of dispensary service. For leadership in medical science and in the formulation and practice of the best clinical standards we may perhaps look to the teaching dispensary, but the standards which they set must be applied on a far larger scale to thousands of dispensaries which can have no direct connection with medical schools.

It is remarkable that considering the enormously rapid growth of dispensaries, so little attention has been given by national bodies such as the American Hospital Association, the American Medical Association, the American College of Surgeons, to the formulation of standards of dispensary practice. It is much to be hoped that some standards, similar to those promulgated for hospitals by the College of Surgeons, shall be extended to out-patient services.

The number of patients reached by dispensaries is larger than that touched by the hospitals. The opportunities for the prevention of disease, for the study and treatment of chronic and various special conditions (which fills so large a part of private office practice), are greater than the usual opportunity of the hospital. The opportunities for teaching the graduate and the undergraduate student of medicine are as great or greater than those afforded by the hospital. The fact that many of the older physicians, particularly the surgeons, do not give personal attention to out-patient clinics perhaps partly accounts for their neglect by national bodies. From the standpoint of the needs of the community and of medical education and research this neglect should not continue.

It is of particular importance to define the relationship which ought to exist between the medical work of the out-patient service and the medical work of the hospital. In too many organizations the hospital service and out-patient service are conducted in the same building, under the same board of trustees. The same patient who may be cared for in the same branch of the institution is practically two. The work done in one division and the records made therein may never be seen by the other. Duplication of work with its added expense; lack of continuity of service to the patient; failure to utilize the out-patient clinic for follow-up service; failure to utilize the out-patient department to save hospital bed days: all these

[2]Dispensary Service in the United States, Journal A. M. A., Vol. 79, No. 6, August 5, 1922.

elements of inefficiency result from lack of unification of the hospital and out-patient department.

Need Unit for Measuring Work

It is also important to define much more accurately the units in which the bulk of out-patient work can be statistically measured. Much confusion exists at the present time as to terms, as, "What is an out-patient?" and, "Is a new patient one who comes to the institution for the first time in a given year, or for the first time in his life, or for the first time to a particular department?"

For example, if an individual enters a medical clinic in the early part of January, and in March goes for the first time in his life to the eye clinic, is he to appear as two new patients in the statistics, or as one?

At a recent conference of superintendents a group of four different working definitions of the term *patient* were found to exist. The same is true of the term *visit*. Some institutions record every entrance into the building as a visit, others only when the patient sees a doctor. In some institutions a patient who goes to two departments in the same day makes two visits, in others only one.

The Journal of the American Medical Association[3] remarks, concerning the problem of fees paid by patients, on the great lack of uniformity of the rates and manner of collections of such charges; another subject to which the attention of administrative officials might well be devoted.

Must Study Community Needs

Finally, it may be said that the units with which dispensary service should be measured, with respect to the needs of the community, also require definition. What is the relative bulk of dispensary service given in a community, as compared with other types of medical care in private practice or in hospitals? How shall the relative part played by dispensary service be compared with the needs of the community for it, or with the amount of service rendered by doctors in their own offices? By what units, if any, can such a comparison be stated, so that a city or country can pursue some process of study and thus determine whether dispensary service is needed, and how much is needed?

Practically nothing has been done to establish units of this type. Should these units be the number of working hours by doctors in clinics, or should they be the number of hours during which clinics are open for the treatment of patients? The two items are not the same, since patients receive service in clinics from other than physicians, e.g., from pharmacists, x-ray technicians, masseurs, laboratory technicians, nurses, social workers, etc. What is the best unit with which to measure dispensary service in community terms, or to make comparison between the amount of medical service offered in clinics and the amount offered ambulatory patients in private offices? This subject is offered merely to promote discussion.

On the whole, the slightest consideration of the facts presented in the opening parts of this article indicates that in recent years there has been an astounding development of an apparently new type of medical service in this country. The growth of dispensaries is now proceeding in middle-sized and smaller towns and in parts of the country which until recently knew no such institutions.

Medical Men Must Help

Physicians and hospital administrators must devote much more attention to this development, to its guidance and standardizing. Too much of the attention thus far given by medical men has been criticism, which has not helped to guide, and which in the face of a popular demand for dispensaries has in most communities not succeeded very well in occasional efforts to oppose. The proper development of dispensaries must largely depend upon the constructive help of professional men; for dispensary service must be properly correlated with private medical practice on the one hand and with hospital service on the other, if the members of the medical profession are to be treated fairly and the public is at the same time to receive adequate service.

The growth of dispensaries challenges likewise hospital trustees and administrators to do their part in standardization and guidance. The very newness of the dispensary in its present forms makes the work easier in some respects than in the case of the dispensary's older and as yet more affluent brother, the hospital.

[3]Journal A. M. A., Vol. 79, No. 6, August 5, 1922, p. 477.

ENGLAND OPENS FIRST NEUROPSYCHIATRIC HOSPITAL AND CLINIC

There has recently been opened in London a mental hospital designed for the treatment and investigation of organic nervous diseases, neuroses and incipient psychoses. This is named the Maudsley Hospital, after the late Dr. Henry Maudsley, an eminent alienist and psychologist, on whose initiative the London County Council founded the institution, the first of its kind in that country.

Dr. Maudsley during his lifetime gave $150,000 and left an additional $50,000 in his will, for this purpose. There are 157 beds for in-patients, as well as an out-patient department. The hospital is intended primarily for the early treatment of mental disease and also to afford opportunities for diagnosis of cases in which special facilities are necessary.

DECATUR AND MACON COUNTY NURSES' HOME

By R. HELEN CLELAND, R.N., Superintendent, Decatur and Macon County Hospital, Decatur, Ill.

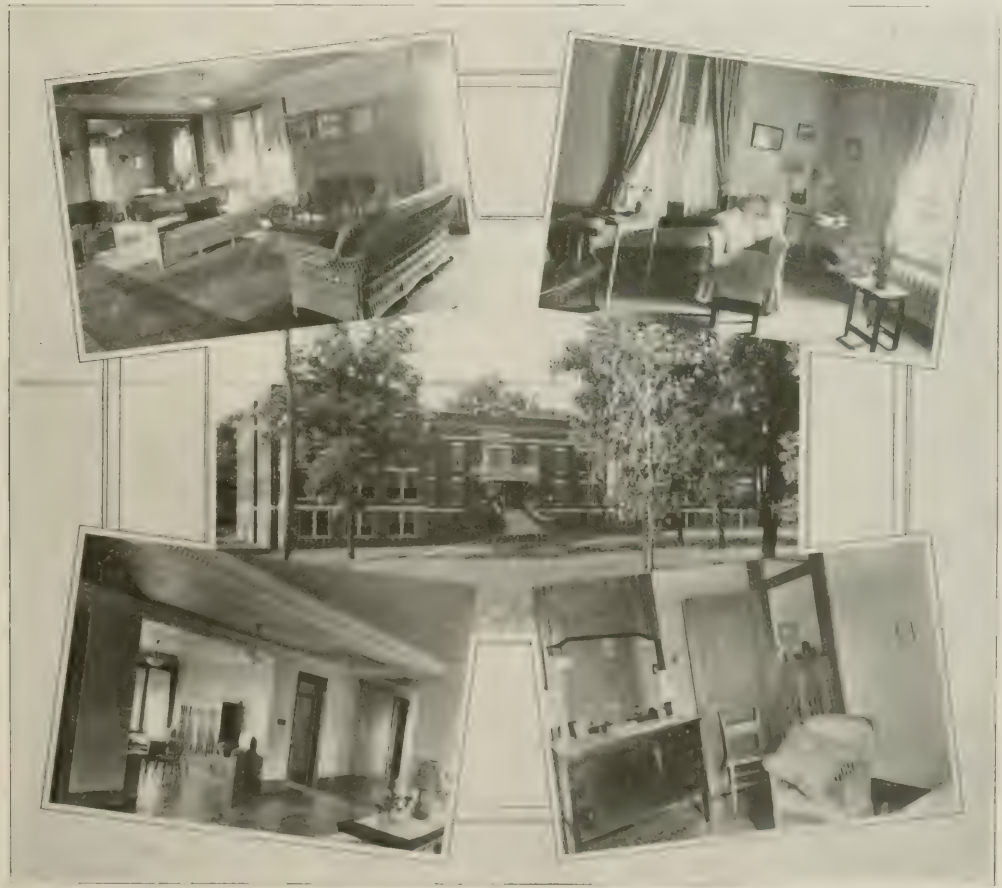
IN A beautiful grove of walnut trees on the outskirts of the city of Decatur, Ill. is the William C. Johns Home for Nurses, pleasingly surrounded by shrubbery and flowers. The grounds of this home for the nurses of the Decatur and Macon County Hospital are like a campus, and among the trees are a small swimming pool and a tennis court for the student nurses.

The building itself is of Decatur dark red brick with stone trimming, a fireproof structure. Floors are of oak laid over cement, the woodwork is stained oak, and the walls are painted a soft shade of old ivory.

On the basement floor are the classrooms, demonstration rooms, instructor's office, recreation room, sewing room, trunk room, gymnasium, shower baths, small laundry, kitchenette and dining room. The dining room has a large fireplace and is furnished with prettily painted table and chairs; there the nurses can entertain their friends at small luncheons.

As one enters the first floor there is a large living room with a fireplace, a music room, reception room, office, reception room for officers and individual rooms. The furniture is wicker with cretonne upholstering and cushions.

Nurses' rooms are single, without exception,



Within and without, the nurses' home of the Decatur and Macon County Hospital is attractively modern.

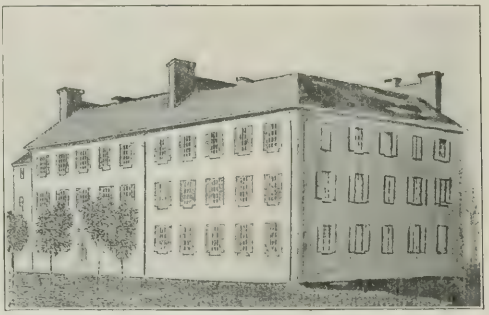
and no two are furnished alike. Each room has a day bed, bureau, bookcase and writing desk combined, wicker chair with cretonne cover to match the bedcover, rug and a stool for the writing desk. Each floor is well provided with lavatories, and each has two sleeping porches. The second floor is much the same as the first with a living room, reception rooms and library.

Few private schools can boast of more beautiful surroundings inside and out than those of this nurses' home at Decatur which was opened on May 19, 1920.

HOSPITALS OF OHIO, PAST AND PRESENT, WITH RECOMMENDATIONS FOR THE FUTURE*

By R. A. BRINTNALL, M.D., Former Chief, Bureau of Hospitals, Ohio State Department of Health, Columbus

REVIEWING the hospital situation in Ohio for one year is not so difficult a task, owing to the annual registration and report required from all hospitals by the state department of health. However, it has occurred to the writer to prelude this article with a history of the Ohio hospital situation from its beginning through to the present time. It would seem to be a bright idea, but its brightness grew dimmer and dimmer in the attempt to get definite data. Sources of information relating to the early history of Ohio's hospitals are so fragmentary, so widely scattered, and so often hidden in other things, that it has been practically impossible to find definite and correct details regarding their growth.



Commercial Hospital and Lunatic Asylum of Cincinnati, Ohio's First Hospital.

Our earliest institutions had no centralized filing systems in which case histories and records might be kept, and the amount of bookkeeping done was very meager. In fact it was not necessary at this time, as there were only two reasons why people went to a hospital; they were either crazy or else too poor to go any other place. At this time any person unable to be cared for in his own home during illness was considered unfortunate.

It is practically impossible to give a description of the service given in our earliest hospitals, but imagine if you will an institution built without thought of sunlight and sanitation, manned by untrained attendants, and staffed by men with no knowledge of modern methods in medicine, surgery, and asepsis, and you may paint your own picture. When we realize that even as late as the early part of the eighteenth century one of the requirements of female hospital attendants was that they did not get drunk too often, even the wildest dreamer of that time could not foresee the modern hospital of the present day.

The first hospital to be established in the state was what is now the Cincinnati General Hospital in 1821. Cincinnati, at this time, was a community slightly over 10,000 in population and just emerging from the customs and practices of a frontier village. Dr. Daniel Drake, having established the Medical College of Ohio, conceived the idea that in order to have clinical material for the purpose of undergraduate instruction such an institution was necessary, and in order to provide for these apparent needs, he began the difficult task of obtaining legislation providing for the establishment of a public hospital. The project met with considerable opposition, but with the assistance of several loyal friends, notably William H. Harrison, future president of the United States who at that time was serving in the general assembly of Ohio, a law was passed on January 22, 1821, a part of which is quoted:

Section I. That there shall be established in the Township of Cincinnati in the County of Hamilton, a public infirmary to be known by the name of the Commercial Hospital and Lunatic Asylum of Ohio.

Section II. That there shall be appropriated for the erection of said infirmary the sum of $10,000.

Section III. That the trustees of Cincinnati Township for the time being shall be managers of this fund. They shall provide out of the fund of the Township and City for the edifice consisting of no less than four acres situated in a healthy part of the Township within one mile

*Part I of Dr. Brintnall's review of Ohio hospitals. The second installment of the article dealing with present conditions and containing recommendations for future developments will be published in the May issue.

of the landing place for boats navigating the Ohio River. They shall erect suitable and permanent brick buildings and so construct them that they may serve for the reception, comfort, and medical and surgical treatment of such persons not residents of said Township as may be hereinafter designated: and also such paupers, residents of the Township, as the trustees may choose to place therein: those who are diseased and infirm to be treated as patients: Those who are able to work to be kept at such employment as the trustees may prescribe and the proceeds of their labor to pass into the treasury of the Township to be applied entirely and exclusively to the use and benefit of the institution.

Section VI. That said Asylum shall be at all times open for the protection, safe keeping, comfort, and medical treatment of such idiots, lunatics, and insane persons of this State as may be brought to it for these purposes.

Section VIII. That it shall be the duty of the faculty of the Medical College of Ohio to give to all of the patients the medical and surgical advice and service which their cases may require without charge.

Section IX. That the trustees of the Township of Cincinnati shall have the exclusive management of said hospital and asylum with the full power to appoint a steward, matron, and such other servants as may be necessary with the exception of the appointment of the apothecary or house surgeon which shall be made by the faculty of said college.

EARLY OHIO HOSPITALS.

CITY	FIRST HOSPITAL	1850	1865	1880	1900
Akron	City Hospital, 1892	0	0	0	1
Canton	Aultman Memorial, 1890	0	0	0	1
Cincinnati	Cincinnati Gen'l, 1821	2	7	[illegible]	16
Cleveland	Cleveland City, 1837	2	5	8	16
Dayton	St. Elizabeth's, 1879	0	0	1	2
Findlay	Home and Hospital, 1895	0	0	0	1
Gallipolis	U.S.P.H.S., 1881	0	0	0	1
Hamilton	Mercy Hospitel, 1892	0	0	0	1
Ironton	Gray Deaconess, 1898	0	0	0	1
Kenton	Antonio Hospital, 1897	0	0	0	1
Lima	Lima Hospital, 1899	0	0	0	1
Lorain	St. Joseph's, 1892	0	0	0	1
Columbus	St. Francis, 1865	0	1	1	7
Perrysburgh	Heinfrank, 1897	0	0	0	1
So. Euclid	Rainbow Cottage, 1891	0	0	0	1
Springfield	Springfield City, 1889	0	0	0	1
Steubenville	Gill Hospital, 1897	0	0	0	1
Toledo	St. Vincent's, 1855	0	1	2	4
Xenia	McClellan, 1898	0	0	0	1
Youngstown	Youngstown, 1882	0	0	0	1
Zanesville	Bethesda, 1888	0	[illegible]	0	2
TOTAL		4	14	20	62

Note: All hospitals are listed operating prior to 1900; military hospitals are not included.

The hospital when completed was a brick building with a fifty-three foot frontage and a depth of forty-two feet, three stories in height and a tenantable basement. The structure contained eighteen wards or compartments, equally divided east and west of a central stairway. On the top floor was a lecture room, seating about 100 students. The basement was used for the accommodation of the aged, infirm, indigent, and orphans.

In 1833, the Cincinnati Orphan Asylum was established and the orphans, who up to this time had been housed in the basement of the hospital, were transferred to the new institution and the hospital's activities as an orphanage came to an end. In 1853 separate institutions were established for the care of the aged and infirm and also for the insane.

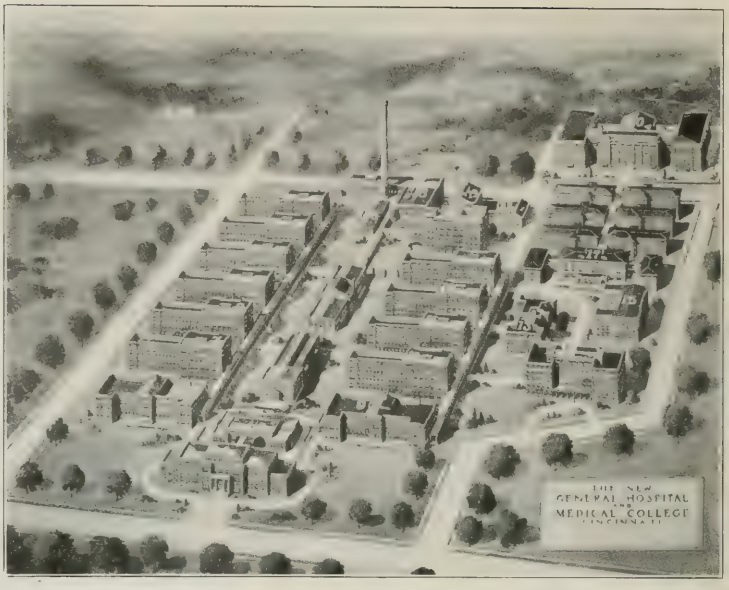
Becomes City Hospital After War

By the year of 1860 this institution which at the time of its inception had been hospital, lunatic asylum, orphanage, infirmary, and indigent home, had become a hospital in fact as well as in name. An appeal was made to the general assembly in 1861 to change its name to the Cincinnati Hospital of Cincinnati and, at the same time, provided for a board of seven trustees thus removing it from the control of the township trustees. At the close of the Civil War, overcrowding was so marked that it required but little argument to induce the city council to appeal to the state legislature for authorization to create a municipal debt for the erection of a new hospital, subject to the approval of the people. In 1868 popular vote sanctioned the issue of bonds amounting to $250,000 for a new hospital, the name of which, by act of legislature, was changed to Cincinnati Hospital. This building was completed in January, 1869, at a cost approximately four times the amount of the original bond issue. In 1871 an outdoor dispensary was established and during the first ten months treated 4,084 patients. In 1877 the upper floors of the institution were remodeled so as to serve as apartments for interns, and an amphitheater and operating room were established with a seating capacity for 500 students. For many years the annual report of this institution carried statements relative to the inadequacy of funds for maintaining the hospital buildings. Repairs were long delayed and different wards closed in order to economize, the necessary funds not being at hand. There is a note in the annual report for 1892 that during the last six months the departments of ophthalmology, venereal diseases, and gynecology were closed because of insufficient appropriations.

Owing to the increased demands for service and overcrowded conditions, an act was passed by the state legislature in 1902 authorizing and empowering the board of trustees to make additions and alterations to the hospital, and the new Cincinnati General Hospital came into existence, requiring a bond issue of $3,820,500.

The growth of the Cincinnati General Hospital has been dwelt upon more or less at length,

mainly for the reason that its evolution is analogous to other early Ohio hospitals and that from the Commercial Hospital and Lunatic Asylum of Ohio in 1821, it is today a modern municipal hospital in every sense of the name. It is functioning to the fullest extent as a teaching hospital and in the performance of this function compares with the best university hospitals in the country. It is cooperating with every agency that has for its purpose the public health of Cincinnati. Its aim is to furnish competent, adequate, and efficient surgical and medical services to every patient's demand, as well as to play its part in the general program for better health in the state.



A view of the new General Hospital and Medical College, Cincinnati.

The next hospital to be established in the state was what is now Cleveland City Hospital, in 1837. In the year 1850, there were just four hospitals within the state. This was increased in 1865 to fourteen, in 1880 to twenty, while in 1900 there were sixty-two hospitals operating in the state. It was not until this time that the fog of old superstitions and dread was being lifted from the public mind. Nurses' training schools, anesthesia, and modern surgery combined, were beginning to play their part in hospital service and from this time on the hospital growth was very rapid.

The new psychopathic ward, Cleveland City Hospital, is a long step from the early "lunatic asylums."

The sources of information regarding the early history of nursing in Ohio is even more baffling than that of hospitals, owing to the fact that there are so many types of training schools. The list of the American Medical Association, published every two years, gives Lakeside Hospital as establishing the first school in 1866, but in all probability the real training school did not come into existence in Ohio previous to 1875, if then, as the records of well established schools are not available in any amount previous to 1880. It was necessary also for these schools to go through a process of evolution. The attitude of aloofness maintained at first toward one another was ludicrous. It was bad form for representatives of one hospital to visit another and it was proper to maintain a dignified unconsciousness that there were any other hospitals than one's own. Happily this condition no longer exists.

The next important step in medical advancement in Ohio was the law providing for the state board of medical registration and examination passed in February, 1896, and a law regulating the practice of nurses passed in April, 1915.

In our brief history of Ohio hospital growth, no effort has been made to give the work done during the war of the rebellion. It would be of too great a length to attempt here. Anyone interested in this may read "The United States Sanitary Commission in the Valley of the Mississippi," by Dr. Newberry, published in 1871.

OVERCOMING ADVERSITIES IN A HOSPITAL CAMPAIGN

By The Rev. RICHARD F. FLYNN, Pastor, St. Mary's Church, Champaign, Ill

LOOKING in retrospect over the adverse conditions which confronted Mercy Hospital, Champaign, Ill., in the summer and autumn of 1921, it seems nothing short of a miracle that the campaign for $150,000 was a complete success; yet there was nothing of the miraculous in the hard work, long hours and painstaking direction that carried our effort over the top. This remarkable achievement is an exemplification of how an uninterested community may be educated to see a public need and then organized to meet that need. Certainly I have never noted a finer example of coordinated effort than that which netted $153,266 in twelve weeks for Mercy Hospital.

Champaign County, the area over which we operated in this campaign, does not boast an unusually large Catholic population, while in the Twin Cities of Champaign-Urbana, Catholicism is not the predominating creed. It was obvious at the outset that if our campaign was to succeed, the entire population must be aroused. This, I must say in commendation of those directing our drive, was done to a most remarkable degree. Before it closed, opposition had been overcome, warring factions had been pacified, objections cleared up and a loyal, earnest body of men and women, Catholic and Protestant, Jew and Gentile, rich and poor, farmer and city dweller, were banded together in a common cause—that of providing adequate hospital facilities for Champaign County.

Perhaps a better appreciation of the difficulties overcome may be obtained from a short history of Mercy Hospital as it was before the campaign began.

Hospital Had Small Beginning

In January 1918 St. Mary's Hospital, a remodelled dwelling at Fifth and White Streets, Champaign, a small institution with some dozen beds, came into existence. From the beginning, it was crowded to capacity, proving that the community needed more hospital beds and needed them badly. The three sisters in charge were forced to work long hours and under severe strain, yet so well were the affairs of the little hospital administered that it paid for itself in a year. With the success of St. Mary's Hospital, the idea of expanding through a building campaign grew stronger and stronger.

Persons who had been patients at St. Mary's were our most enthusiastic supporters when this suggestion was made, but those who doubted were numerous. Local institutions for the care of the sick had attempted drives with little success. The overcautious pointed to these as indicative of the public's unwillingness to finance hospitals here.

Added to this, drives were coming thick and fast in Champaign County. The nationwide stadium campaign of the University of Illinois was being pressed upon the alumni and students of that great institution. Since affairs in the cities of Champaign and Urbana revolve largely about the university, it is plain that a large share of the citizens were directly affected.

Another campaign in progress was the $225,000 bond issue of the Urbana hotel fund which was being floated among the citizens of the Twin Cities. And as if these were not sufficient to draw interest and effort away from Mercy Hospital's plea, the Boy Scouts of America, the Salvation Army and the American Red Cross added their drives. Considering the appeals made to the pocketbooks of this section simultaneously with our effort, it is indeed amazing that a small nucleus could be found with the temerity to hope for even partial success.

Within our own church there was dissension. The question of location entered into this, as did the advisability of attempting to erect a new hospital at this time. Local conditions were anything but roseate when a professional campaign director was called into conference on our hospital problem.

Survey Precedes Drive

Campaign and community were subjected to the acid test of a survey. The campaign director talked with persons in all walks of life, studied statistics, interviewed the leading citizens, left nothing undone which might shed light on the subject. At the conclusion of the investigations, the answer was, "It can be done."

Campaign headquarters were opened in the Beardsley Hotel in Champaign on August 15. On October 23, our intensive drive began and two weeks later, November 4, more than $152,000 was announced at our closing meeting. A whirlwind canvass of the county by our woman's division followed this and put the total up to $153,266.

How it was done is the story of scientific organization as brought about by an experienced, competent campaign director. Mercy Hospital owes much to its thousands of contributors and to the hundreds of prominent men and women who served on the various committees, but the palm must go to their financial director for bringing out these forces and welding them together into a harmonious machine for raising money. I do not mean to say that with the acquisition of this competent leadership all became smooth sailing. Far from it.

Newly organized groups in the county resigned over night and obstacles in the way of opposition that seemed insurmountable suddenly appeared to block our way. By tact, by graciousness, by absolutely straightforward dealing, factional difficulties were eliminated, committeemen influenced by gossip reconsidered their resignations, new names were secured and never once did the tireless advance toward the objective pause.

Our beginning was a modest one. At the start twelve public-spirited men of Champaign met and after canvassing the ground thoroughly and carefully considering detailed report of the survey agreed to underwrite the expenses of the campaign.

All Creeds Represented in Committees

The campaign once begun, a second meeting of this group of twelve was called at which time each was asked to bring in five others to form the men's campaign committee. Seventy-five men were present at this next session and later the campaign committee was enlarged until it numbered some 200 men. In addition to this, an executive committee of ten was formed. This was composed of the chairman and two vice chairmen from Champaign, the chairman and vice chairmen from Urbana, the county chairman and his two vice chairmen and a chairman of organization. The advisory committee was made up of the general chairman, the campaign treasurer, a prominent Catholic layman, a well known Protestant layman and myself.

Mr. A. M. Burke, president of the Citizen's State Bank and a non-Catholic, accepted the post of general chairman and Isaac Kuhn, president of the firm of Jos. Kuhn Clothing Co., was named campaign treasurer. These names are an indication of the way in which all denominational lines were swept aside in the building up of a successful campaign machine.

The same was true in the woman's division of which Mrs. J. M. Kaufman was chairman. Mrs. Kaufman, one of Champaign's most prominent women in social and club life, was induced to take charge of the woman's group by the Women's Advisory Committee, headed by Miss Lottie Switzer, principal of Champaign High School. The women's division, like the men's, grew steadily until it numbered several hundred and included practically all the socially prominent of the university community and the Twin Cities.

Backing the efforts of these two powerful groups were the endorsements of the Chambers of Commerce of the two leading cities of the county, the American Federation of Labor, the Rotary and Kiwanis Clubs, the Elks, the Knights of Columbus, practically every civic and social organization falling into line when it became apparent that the backers of Mercy Hospital were out to win.

No Contributions Sought From Doctors

A feature which may be considered unique in hospital campaigns is that the medical profession was not asked to participate except as individuals. Since practically all the local doctors practiced at Burnham Hospital, the director of the campaign decided that it would be a most unethical procedure to ask the doctors to align themselves with another institution as a body. This delicacy and appreciation of the ethical standards of the profession made a profound impression on the local medical fraternity. They have now, however, an important part since the actual building is under way. A strong medical staff is now one of our greatest assets.

The dailies of the Twin Cities gave us publicity in unlimited quantities and many advertisers ran Mercy Hospital advertisements in their contract space. This generous cooperation from both city and county press enabled us to tell our story to the public without any heavy expenditure under the head of advertising. Billboards, expensive lithographs, feature contrivances for intriguing the public interest were not employed. The director, appreciating the limited finances of the hospital, carried out an economical program which eliminated non-essentials yet entailed no sparing of expense when this would further the cause. In the entire conduct of the Mercy Hospital drive, I may say that modern business methods were always efficiently applied to this new profession of financial campaigning.

I have in this general way sketched the operations of our effort from its humble and much opposed beginning to its final and highly successful conclusion. With the actual construction of Mercy Hospital under way, and the campaign only a memory, it may seem on paper that our mountains were really mole hills and our opposition merely the usual ultra-conservatism of a

community which had seen similar attempts go down in defeat. Those of us who were in the thick of the fight from the first know differently and only those who were constantly "on the inside" know the magnitude of adversities overcome.

Drive Needed Outside Direction

Scores of conferences, long distance messages, hurried railway journeys, long busy days at campaign headquarters with meals frequently unheeded, repeated calls on prospective workers until at last the required pressure was reached—all these things and many others were the portion of the headquarters staff during twelve busy weeks. They accepted these demands on time and energy cheerfully and without complaint. I cannot imagine a more personal interest than that taken by these people who were employed at a stated salary and had nothing to lose through our failure.

Champaign County needed more hospital facilities in 1921, but there was no one among us to develop the idea and properly educate the people to see the need and meet it. No local man or woman however prominent and respected could have disregarded the undercurrent of gossip and factional antagonism brought to bear on this idea. It required the hewing through of the Gordian knot. This was accomplished through the services of a professional campaign director.

Hospital drives are not uncommon and many of them may have a larger plus subscription. Many may have been organized in less time and still others may have been conducted for less expense; yet knowing our local situation as well as I do, I question if any successful efforts started with less, encountered more direct opposition and had more competition from other sources than did Mercy Hospital (formerly St. Mary's) of Champaign, Illinois.

SAFETY CODE ON WALKWAY SURFACES

A conference attended by sixty-three representatives of trade associations, technical societies, safety organizations, and government departments, held in the Engineering Societies Building in New York, February 14, declared by unanimous vote, "that it is desirable to have a nationally uniform safety code on walkway surfaces" and that the development of this code should be carried out under the procedure of the American Engineering Standards Committee.

The conference voted to include in the code the following places: elevator floors, elevator landings, corridor floors, ramps, runway floors (subject to interpretation by the sectional committee which will prepare the code), stair treads and landings, fire escape treads and landings, floors around machinery and at door thresholds, and sidewalk hazards, such as coal hole covers and sidewalk doors. It was recommended that the sectional committee consider the question of platforms in front of electrical apparatus, especially switchboards and floors around machinery in motion, as to insulation and non-slip qualities. This new code will apply to hospitals, apartment houses, factories, office buildings, hotels, restaurants, railway cars, railway stations and train platforms, schools and theaters.

The conference voted that the performance characteristics which should be considered in walkway surfaces are: resistance to slipping, durability, freedom from the tripping hazard, and flammability. General and maintenance requirements will also be included in the code.

Sullivan W. Jones, representing the American Institute of Architects, said that there is at present no standard of what constitutes a safe floor and that the A. I. A. was, therefore, very strongly in favor of the preparation of such a code.

Sidney J. Williams, chief engineer of the National Safety Council, acted as chairman of the conference.

The next step in the development of this code will be the appointment of sponsors by the American Engineering Standards Committee and the organization of a sectional committee which will draft the code. This sectional committee will be composed of official representatives of all organizations concerned with the subject of safe walkway surfaces, either as producers, consumers, casualty underwriters, or governmental officials representing the general public.

WANT HOSPITAL WORKERS IN ALASKA

A doctor, a nurse and a hospital housekeeper will find great opportunity for a consecrated professional career in connection with Presbyterian medical missions in Alaska, according to an announcement made recently by the Rev. Fred Eastman, director of educational work for the Presbyterian board of home missions, 156 Fifth Avenue, New York.

The doctor, said Mr. Eastman, is urgently needed for Cape Prince of Wales. He must be filled with the missionary spirit and should be married. While his work would be hard and the situation lonely, still there would be abundant circumstances to satisfy the candidate's desire of adventure and zeal for service, and there is every reason why he should be able to develop a work comparable to that of Dr. Grenfell of Labrador or that of Dr. Frank H. Spence and Dr. Henry W. Greist, Presbyterian medical missionaries at Point Barrow, the farthest north hospital in the world, at the apex of Alaska.

It is for this Point Barrow Hospital that a housekeeper is very much needed. The chief requirements are Christian character, sound health, and ability to manage household details. This housekeeper would never be troubled by the problem of ice. The hospital has only to step out of doors to get all the ice it wants, and throughout the nine months of winter the only source of water supply is from melting ice over a fire made of native Alaskan coal delivered by the Eskimos.

The nurse is required at Wainwright. She must be fully qualified as a nurse, imbued with the Christian missionary spirit, and prepared to stand a good bit of privation in order to minister to a very needy people in a cold climate.

DR. GOLDWATER TO VISIT ENGLAND

Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, will represent the American Hospital Association at the celebration marking the 800th anniversary of St. Bartholomew's Hospital, London. At the invitation of the Hon. Sir Arthur Stanley, Dr. Goldwater also will address the British Hospitals Association at its annual meeting to be held at Sheffield, May 31 to June 1.

The MODERN HOSPITAL

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AN ANNUAL CONGRESS OF NATIONAL HOSPITAL AGENCIES

IT IS interesting to observe that what was once the annual conference of the American Hospital Association is rapidly developing into an annual congress of hospital interests participated in by most of the outstanding national organizations at work in the hospital field. Last year, for example, saw the concurrent meeting of the American Hospital Association, the Protestant Hospital Association, the American Association of Hospital Social Workers and the American Occupational Therapy Association. The last-named association joined the group for the first time and will meet with the group again this year. This is an admirable development and should be warmly encouraged by all who have the unity and well-rounded development of the hospital field at heart. The scheme kills two birds with one stone. It enables the smaller and special groups of hospital workers, such as the church groups, the special hospital groups and the groups interested in special phases of hospital work, to secure whatever benefits are to be had from the interchange of ideas within each group and the solution of group problems, while at the same time it provides for a general annual gathering for the consideration of problems and basic principles common to all.

We have examples of successful annual conferences of national agencies in the annual Congress on Medical Education, Medical Licensure, Public Health and Hospitals, a group of six agencies which meets each spring in Chicago, and in the National Conference of Social Work which will convene this year at Washington in May at which time a number of agencies gather not only for the discussion of problems peculiar to their respective fields but for the consideration of social welfare questions common to all.

And this is what the Milwaukee meeting of hospital workers next October will be—a congress of hospital agencies of national scope. Indeed it is so announced.

"SERVICE" IN THE HOSPITAL

THE average American is a good spender whenever his comfort is concerned. When he goes on a vacation, he is perfectly willing to disburse liberally in order that the maximum of comfort and luxury may be his. No matter what economies he may practice in his home environment, he does not stint the cost when he is abroad on pleasure bent. But when he goes to a hospital, it is with a wrench that he pays the costs involved, even though they are usually not in excess of the daily rate of a first-class hotel.

Why is this? Why does he begrudge an operating-room fee which is not much larger than that which he would give a head-waiter for a good table? Why is he averse to paying less for a prescription than he would for an equal quanitity of boot-legger product?

In the first place, he doesn't choose to go to a hospital. He goes because he has to go. He wants to go to a good hotel, but the best hospital in the world has no temptations for him. A good hotel is a place of cheer and welcome. There is apt to be a gloomy forbidding air about hospitals and the average layman profoundly mistrusts them. In his mind, they are associated with pain, suffering and restraint. When he goes to a hotel, the management gives him a hearty welcome. Did anybody ever catch a hospital superintendent "glad-handing" an arriving patient? When he goes to hotel for the second time, the manager says, "Glad to see you, Mr. Man. How are things in the shoe business?" When he makes his second trip to the hospital he is apt to be greeted, "Back with the old leg, Mr. Uh-m-m?" In other words, the hospital seems to be more interested in the leg than the man who is wearing it.

Secondly, he gets "service" at a good hotel of a character which he can understand and appreciate. Every employe greets him by name; the room clerk asks about the weather in Oshkamazoo; the barber tells him his views on light wines and beer; the boy in the elevator asks what he thinks of Fly-by-night in the third race. He is made to feel that he is an honored guest.

Guest—that's the word! At a hotel he's a guest; at a hospital he's a patient. Unconsciously the word "patient" carries to his mind the idea of "patience," of patient suffering at the hands of efficient but not particularly human people. In the hotel, nothing is too much trouble; in the hospital, he is governed by a set of prohibitory rules. He doesn't see nor understand the "service" which goes into his hospital care. When his visitors tell him that they have been obliged to walk up three flights of stairs because the elevator is out of order, he feels (if he stops to think about it) that a good hotel never has all of its elevators out of commission at one time. He knows that in many good hotels, a newspaper is slipped under the door each morning with the compliments of the house, that if he wants a suit pressed or his boots cleaned or any other service performed, he has only to pick up the telephone. In a hospital, he pushes a button and after a while a starched student nurse enters. "Won't you please send up a boy with a package of Camels?" says he. "We don't carry cigarets in the hospital. There's nobody to send out for them and patients are supposed to bring their own," says she. "Well then send up a manicure," says he. "Here's an orangewood stick," says she. He wants his boots cleaned and his suit pressed before he goes home. Does he get these services? He does not. He is huddled into his clothes that come out of the locker looking as though he had slept in them, wipes the dust off his shoes with the plantar surface of his socks and when he gets home the family tells him that he looks as though he'd had a bad time. To which he heartily agrees.

Perhaps this picture has been overdrawn but there is an impersonal attitude about many hospitals which is hampering their field of usefulness. To be sure a hospital is not exactly a hotel, but for the sick man it is temporarily one, and the hospital can well afford to take a leaf out of the book of modern hotel management. Surely if it is worth while to anticipate the wants of the well man, it is infinitely more necessary that the little things, which in the aggregate make for real comfort and even luxury, be taken into account. In the care of the sick man, a good many of the niceties of life are lost sight of, or sacrificed to, the big idea of cure. But care is one of the means of cure and while ragged napkins and blistered paint are not instruments of cure, they are offensive to the esthetic senses. Little delicacies of service are more appreciated by patients than is generally realized. The patient "wants what he wants when he wants it"; too frequently he "gets what he gets when he gets it." If he is made to feel that the hospital management is interested in him personally first, and in his disease secondly, his confidence will be more easily obtained. And from this confidence and faith flows cooperation with those who essay to heal him. He must never be a "case"; he should scarcely be a "patient"; he should be a "guest."

STATE HOSPITAL MEDICAL STAFFS

DURING the war, the neuropsychiatric service found the medical staffs of state hospitals its chief source of supply, and with the exception of these too old almost all were taken. These institutions have not yet recovered, for only a small proportion of those who went to the front have returned to the state hospital. Many remained in the army or navy or joined the public health and federal hospital services, all of which offered them higher salaries than state service had paid. Nor have the states yet met the scales established by the federal service, although some of them have made an effort in this direction.

Federal hospital service, in most instances, is

much more attractive to the live medical man than state service. Ambitious practitioners in search of varied experience can see in it possibilities which are not apparent in the state hospital. One very important thing that appeals to them, quite aside from professional advancement, is their independence in government employment.

Many state hospitals require the members of their medical staff to live in the institution but rarely furnish them with living quarters suitable for professional men. Few of them give their medical men, especially those who are married, even decent accommodations; they are usually housed in "center," which is filled far beyond its capacity; there are common bath tubs and a common table; food is frequently very poorly cooked and without variety. No less disgraceful than a state hospital's crowding of its patients is the crowding of its medical men and their families.

Efforts have been made to induce these institutions to erect for staff members and their families detached cottages where they may raise their children in quiet and peace, where they may entertain and enjoy some social life, where they may buy and prepare their own food. The plan is feasible. It has been tried. Notable illustrations are the guards' homes at the Massachusetts reformatory, which are located on a street facing the institution. The state erected the houses, pays its men in cash and charges them sufficient rental to maintain the property.

State hospitals usually own enough ground to make it possible to accommodate such cottages at a distance from the institution. But if they do not, the matter of purchasing a few lots in the city or town nearby is immaterial. Professional men in such an institution should receive a salary in cash and be permitted to live their lives as normal beings under normal conditions.

RETURN YOUR CENSUS SCHEDULE

UNDER the federal laws a census of hospitals and sanatoriums must be taken decennially. The last census was taken in 1912 and the Bureau of the Census is now engaged in taking one for the year 1922. The schedules were mailed in February.

The information gathered for the calendar year 1912 left much to be desired on the part of many who have been interested from time to time since then in studying statistics of the hospital field in the United States. In the preparation of the schedules that are now being sent out, not only for hospitals and sanatoriums but also for dispensaries, the Bureau of the Census very wisely sought the advice and cooperation of the American Hospital Association, the Council of Medical Education and Hospitals of the American Medical Association, the New York Hospital Information Bureau and the Committee on Dispensary Development of the United Hospital Fund of New York. This has resulted in the formulation of most excellent schedules. Every hospital, sanatorium and dispensary owes it to itself, as well as to those who are interested in studying the national hospital field, to regard the filling of these schedules as an important duty.

The director of the bureau informs us that thus far there has been a most favorable response. There are still many institutions, however, that have not yet returned the schedules. We earnestly urge them to do so promptly in order that there may be an early and full response to the Bureau's request. If any hospitals or dispensaries have not yet received their schedules they may obtain them by addressing the Bureau of the Census, Washington, D. C.

MERCHANDISE OF INTEGRITY

DURING the past few months the war department, through the supply branch of the surgeon general's office, has held a number of auction sales of several million dollars worth of surplus medical and hospital supplies.

While the war department, in holding these sales, has acted under instructions from the government and while it has not misrepresented the property offered, there is reason to believe that some of the supplies, such as pharmaceutical preparations, surgical sutures, chloroform and other products, have deteriorated and cannot with safety be used by hospitals. Practically all of these supplies have now been disposed of by the war department. Much of this material doubtless has fallen into the hands of shrewd traders who will hawk it about the country without explaining its source to the purchasers. Superintendents, seeing the label of the original manufacturers, may unwittingly assume that the product offered meets present standards. Much of it, on the other hand, may be immediately disguised and resold under different labels.

As we have had occasion to say before, it is our conviction that should superintendents choose to purchase job lots of hospital supplies the least they can do in the interests of their patients is to subject such merchandise to rigid tests and see that shipments conform to sample. Indeed it is questionable whether any hospital superintendent has the moral right to purchase technical supplies from business houses concerning the integrity of whose merchandise he is not absolutely certain.

WINNERS OF ARCHITECTURAL CONTEST ANNOUNCED

THE first international contest in the field of hospital architecture came to a close on March 7, when the judges of THE MODERN HOSPITAL'S competition for the plans of a small community hospital selected the five choicest designs. In accordance with the jury's decision, the following awards have been made:

Butler & Rodman, New York, first prize of $500.

John Roth, Atascadero, Cal., second prize of $300.

Ernest C. Hoedtke, Cambridge, Mass., third prize of $200.

Cervin & Horn, Rock Island, Ill., first honorable mention.

Lemuel Cross Dillenback, University of Illinois department of architecture, second honorable mention.

Fifty-one sets of plans reached Chicago within the time limits set for the competition, and from these designs the jury of award made its judgment on the five bases of economy in operation, economy in construction, integrity of design, health values and flexibility. Twenty states, three Canadian provinces and England were represented when the plans were hung.

(Curtis Bell, Inc.)

Charles Butler, of Butler & Rodman, New York architects, won the first prize in The Modern Hospital's architectural competition for the plans of a small general hospital. Mr. Butler has high standing in the field of hospital architecture both in the United States and in France, where as an expert in hospital planning he was attached to the French Ministry of War.

In the May issue will be published the perspectives, elevations and floor plans of the prize-winning designs with the interpretations and ratings placed upon them by the jury of award. Subsequent publications, with the judges' critical comments, will be made in succeeding issues of some twenty other plans of particular interest and educational value.

It is fitting that in an international contest first award should go to an international figure in hospital architecture, such as Mr. Charles Butler of the firm Butler & Rodman. Mr. Butler's design, modified colonial in style, is a T-shaped structure, two stories high and is considered a model in compactness.

The second prize building is a two-story stucco structure after the Italian renaissance period and is most attractively rendered. Mr. Hoedtke's perspective shows a two-story Georgian building with a tower. The drawings given honorable mention are Elizabethan and Georgian as to style; the former a two-story and basement structure and the latter a one-story building.

Drawings were hung for purposes of judging in a suite of rooms in the Powers Building, Chicago, most happily arranged for the committee's study. The suite was formerly used by an architectural firm and one spacious room was subdivided into quarters by paneled partitions of opaque glass. These panels, in most instances, conformed to the dimensions of the drawings and permitted admirable groupings for comparative study.

Deliberations of the jury extended over a period of three days, March 5, 6 and 7. All of the designs conformed to the contest program, which was fairly elaborate, except one or two which varied in such minor details that inclusion was allowed by Architect Carl A. Erikson, acting for Mr. Richard E. Schmidt, adviser in the competition, whose attendance was prevented by serious illness.

Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, and consultant on hospital construction, was chairman of the jury. Other members were: Asa S. Bacon, superintendent of Presbyterian Hospital, Chicago, and president of the American Hospital Association; Clarence H. Johnston of St. Paul, Minnesota state architect;

William Buck Stratton of the architectural firm, Stratton and Snyder of Detroit; and Miss Adelaide M. Lewis, superintendent of the Kewanee Public Hospital, Kewanee, Ill.

First a careful analysis was made of each individual set of plans and a preliminary rating given. Some with more outstanding faults were eliminated immediately, and the rest were subjected to more careful scrutiny. Finally the designs were narrowed down to eleven, and these were rehung for further intensive study.

Judging was extremely close, so close in fact that in two cases a single point meant a change in the order of award. When the secret ballot was taken, however, the rating of the first five by the various members of the jury was practically identical.

Nos. 50, 13, 3, 8 and 44 were selected in the order named, and when Mr. Erikson broke the seal of the envelopes bearing these numbers, the names of the winners were known. The decision of the judges was conveyed immediately to the successful contestants by telegram, and architects and hospital workers of the nation read of the awards in Associated Press dispatches in their local papers the following morning.

In addressing the jury of award the acting architectural adviser, Mr. Erikson, declared:

"Mr. Schmidt would, I am sure, wish to congratulate the publishers and editors of THE MODERN HOSPITAL on their vision and courage in making these studies available to a group of hospitals that has been generally overlooked in the intensive study given hospitals in recent years. The judgment rendered by your jury will markedly influence the design of the small hospital for the next generation."

Brief biographical sketches of the successful contestants in the prize competition follow:

Charles Butler

Mr. Charles Butler, of the firm Butler & Rodman, winner of the first award, is a graduate of Columbia University and of the Ecole des Beaux Arts in Paris. He is a fellow of the American Institute of Architects; Chevalier of the Legion of Honor, France; Officer of St. Sava, Serbia; and the present president of the New York Chapter of the American Institute of Architects.

For some years Mr. Butler was lecturer on hospital planning at Teachers' College, Columbia University. His firm were architects in association with Wyatt and Nolting of Baltimore for the children's building at Johns Hopkins Hospital.

As an expert in hospital planning Mr. Butler was attached to the French Ministry of War through the year 1916 and in addition to planning war hospitals drew the designs for the permanent 500 bed military hospital at Issy-les-Moulineaux near Paris.

In association with Mr. Edward F. Stevens of Boston, he prepared plans for the 1,000 bed portable hospital units for the U. S. Army Engineer Corps in 1917, and with Mr. Stephens and Mr. L. M. Franklin of New York served on the Committee on Army Hospital Plans attached to the general staff in 1918.

Mr. Butler also planned the camp hospital at Camp McClellan at Anniston, Ala., in 1917 and the Ward Demonstration Hospital of the Rockefeller Institute as expert on hospital planning for the United States Housing Corporation.

Among other hospitals planned by the firm are the additions to the Hudson City Hospital, Hudson, N. Y.; St. Luke's Hospital, Newburgh, N. Y.; Dobbs Ferry Hospital, Dobbs Ferry, N. Y.; the New York Infirmary for Women and Children, New York City; and the American Memorial Hospital for Children in Rheims, France.

Mr. Rodman, the other senior member of the firm, died in 1911.

John Roth, California architect, received second award.

John J. Roth

John J. Roth, who won the second award, also is a man of long experience and wide travel . Born in St. Louis, he received his architectural training at Washington University in that city.

In 1907 he was appointed chief of architectural design with the Insular Service at Manila, P. I., and later spent two years in travel in Japan, China and the Orient.

Mr. Roth returned to St. Louis in 1910 and became senior member of the firm of Roth & Study, architects. He was appointed architectural adviser for the water department for the city of St. Louis and served in that capacity from 1910 to 1915.

In 1915, Mr. Roth was commissioned architect in charge for the Atascadero Estates of Atascadero, Cal., where he designed the Civic Center buildings, including the William Henry Lewis Memorial Hospital. Last year he was appointed supervising architect of the Palos Verdes project at Los Angeles, Cal. He is now practicing architecture in California, and maintains his residence at Atascadero.

Ernest C. Hoedtke of Cambridge, Mass., barely twenty-five years old, was awarded third prize.

Ernest C. Hoedtke

His twenty-fifth birthday will be celebrated this month by Ernest C. Hoedtke, winner of the third prize. He was born in Cambridge, Mass. on April 14, 1898.

In spite of his extreme youth, Mr. Hoedtke has had nine years of experience in architectural offices, his first connection being made at the age of sixteen in the office of the late Joseph D. McGinness. The Boston Architectural

Club maintains an atelier for the instruction of men working in architects' office, and Mr. Hoedtke attended this school from 1914 to 1917, and during these years began to center his interest on hospital design.

During the war Mr. Hoedtke did construction work for the Army Engineers. After the war he worked in several architectural offices in Boston and had some practical hospital architectural work with Charles D White.

For the past three years he has worked for Strickland, Blodget & Law of Boston.

Cervin & Horn

Cervin & Horn, whose design was given first honorable mention, have been associated at Rock Island, Ill., since 1918. Mr. Olof Z. Cervin, the senior member, was born in 1868, was graduated by Augustana College, Rock Island, and received a master's degree in architecture at Columbia College in 1894. He was trained in the offices of Holabird & Roche and Flanders & Zimmerman, Chicago, and in the offices of W. Wheeler Smith of New York where he worked on the plans for the Sloane Maternity Hospital.

Olof Z. Cervin, senior member of the Rock Island, Ill., firm, which received first honorable mention.

Mr. Cervin opened an office in Moline, Ill., in 1896 and later spent two years in travel and study in Europe. While abroad he wrote a series of articles on European architecture for various building and architectural journals and also a series of syndicated letters for the public press.

His first hospital work was in 1908 when he planned the Immanuel Deaconess Institute at Omaha. The following year he moved his offices to Rock Island where nine years later he formed a partnership with Mr. Horn.

The firm built 460 war houses for the U. S. government in 1918 and 1919, and recently planned the following hospitals: Skiff Hospital, Newton, Ia.; Lutheran Hospital, Moline, Ill.; nurses' home, Omaha, Nebr.

Mr. Cervin has been a frequent contributor to architectural publications and to hospital journals. He is chairman of the Rock Island city planning commission and architect of Augustana synod. He holds membership in the American Institute of Architects and the Kiwanis club of Rock Island.

Benjamin A. Horn was born in Chicago in 1887 and is a graduate in architecture of the University of Illinois in 1919. He has had experience as draftsman in the offices of N. Max Dunning, J. C. Llewellyn, Zimmerman, Saxe & Zimmerman, Chicago; Temple & Burrows, Davenport, Ia.; and C. D. McLane, Rock Island, Ill.

Benjamin A. Horn, who with his partner, Mr. Cervin, shares first honorable mention.

He is a member of the American Institute of Architects, the Illinois Society of Architects, the Rotary Club of Rock Island, the University Club of Moline, and Delta Phi fraternity.

L. C. Dillenback

Second honorable mention went to Lemuel Cross Dillenback, assistant professor of architecture at the University of Illinois. Mr. Dillenback is a graduate of Carnegie Institute of Technology with the degree of bachelor of arts in 1913 and master of arts in 1914.

Professor Lemuel Cross Dillenbach of the University of Illinois department of architecture was also given honorable mention.

His practical training was received with the following architects: Lewis F. Pilcher, New York state architect; Henry Hornbostel, Alfred Fellheimen, New York; and Carlton Strong, Pittsburgh.

Mr. Dillenback was one of four selected to compete for final competition in architecture of the American Academy in Rome in 1917.

THE CHOLERA MAN'S EQUIPMENT

In the middle ages a cholera man in order to be full armed to resist this dread disease must be equipped in the following manner: "About his body first a layer of India rubber, thereupon a large pitch plaster, on top of this a copper plate, on the chest a large bag of warm sand. Around the neck a double bandage filled with juniper berries and grains of pepper; in the ears two pieces of cotton wool with camphor; hung on the nose a smelling bottle containing vinegar, and in the mouth a twig of sweet calamus. Over the bandage a shirt, soaked in chlorid of lime, over that a cotton wool jacket and hot brick, and finally a vest sprinkled with chlorid of lime—then a mantle made of oilcloth and a hat of the same. In his right pocket he carries one pound of balm-mint tea, a half-pound of carlyme thistle and a half pound of sage. In his vest pocket he carries a bottle containing camomile oil and in his trousers pocket a bottle of camphor. On his hat he balances a tureen of thick gruel, in his right hand he carries a shrub of juniper, and in his left hand an acacia branch. Strapped to his body is a small wagon which he pulls after him and in which there are fifteen yards of flannel, a boiling kettle, ten scrubbing brushes, eighteen bricks, two hides and a comfort stool. He must wear a mask made of curly-mint paste and keep a quarter of a pound of calamus in his mouth."

Some have much and some have more,
Some are rich and some are poor.
Some have little, and some have less,
Some have not a cent to bless
Their empty pockets, yet possess
True riches in true happiness.

—John Oxenham.

CONSTITUTION AND BY-LAWS OF A HOSPITAL STAFF

By ROSCOE C. WEBB, A.B., M.D., F.A.C.S., Minneapolis, Minn.

THE trend of progress in modern hospital practice, together with the activities of the national medical and surgical organizations which are advancing the cause of hospital standardization, has produced a widespread influence on physicians and surgeons privileged to practice in the various hospitals and has resulted in their organization as definite groups or staffs. The writer recently was confronted with the problem of writing a constitution and by-laws for a large general private hospital of the "open" type. Information placed at our disposal by the Hospital Library and Service Bureau was consulted and the provisions occurring in other hospital publications were freely used, selecting those which appeared most applicable in this type of hospital. After numerous hours of study and frequent committee meetings a constitution and by-laws were finally passed by the staff. This article is submitted as a possible working basis for others engaged in this problem.

Hospitals of this variety naturally have some staff members who are more actively engaged in hospital activities than others. Also the general policies of the hospital staff should be managed by a small group of men representing the various specialties. For this reason the staff has been divided into an executive staff and a general staff. In order that the organization may at all times be thoroughly democratic and at the same time be under the satisfactory control of the board of trustees of the hospital, candidates for membership on the executive staff are chosen from a group of candidates for each position who have been previously approved by the board of trustees. Thus both the staff and the trustees are relieved of any possible embarrassment as a result of the elections, and on the other hand members desiring such positions may offer their candidacies and announce their intentions.

The constitution provides a general outline of the membership, duties of the executive staff, officers, meetings, by-laws and amendments. An attempt has been made to give general provisions only and to arrange them in logical sequence.

The by-laws provide in detail for the duties of the staff officers and members, providing in particular for a proper record system. A set of rules is supplied in one section of the by-laws, embodying the necessary provisions required in every well organized hospital as well those peculiar to the hospital under consideration.

Constitution

Article I—Name.

The name of this organization shall be the "Blank Hospital Staff."

Article II—Object.

The object of the Blank Hospital Staff shall be to increase the efficiency of the hospital and to standardize and improve the different departments in order that the welfare of patients may be promoted, educational advantages afforded to interns, students, and nurses, and opportunity offered for the scientific advancement of the attending physicians and surgeons.

Article III—Division of Staff.

The staff shall be divided for purposes of efficiency into an executive staff and a general staff.

Section 1. (a) The executive staff shall be chosen from the general staff by election at the annual meeting from candidates previously approved by the board of trustees, and shall be responsible for the general conduct of the Blank Hospital Staff.

(b) The executive staff shall be responsible for the professional conduct of the hospital and for the care of all charity patients admitted to the hospital without previous professional assignment. Private patients entering the hospital without previous professional assignment shall be assigned to the proper member of the executive staff on duty.

(c) The various departments of the hospital shall be represented on the executive staff as follows: medicine, two; surgery, two; obstetrics and gynecology, two; eye, ear, nose and throat, two; pediatrics, two; dermatology, two; genito-urinary, two. Additional members may be added when necessity demands, representing the other specialties not mentioned herein.

Section 2. The general staff shall consist only of duly licensed practitioners of medicine who are competent in their respective fields and worthy in character and in matters of professional ethics; in this latter connection the practice of division of fees under any guise whatever shall be prohibited. Members of the general staff must be members of or be applying for admission to the Blank County Medical Society and applications for membership in the general staff must be approved by the executive staff.

Article IV—Officers.

The officers of this organization shall be a chairman, vice-chairman and a secretary-treasurer who shall be elected each year from the staff by the staff and shall perform the usual duties of these officers at all meetings of the executive staff and the general staff.

Article V—Meetings.

Section 1. There shall be an annual meeting of the staff for the election of officers and members of the executive staff. Twelve members shall constitute a quorum at general staff meetings.

Section 2. There shall be a scientific meeting once each month attended by members of the staff and other members of the medical profession.

Section 3. There shall be business meetings of the executive staff at any time during the month when the chairman may find such a meeting desirable or upon the application of three members. Five members shall constitute a quorum for the transaction of business by the executive staff.

Article VI—By-laws.

The details of administration of this organization not provided for by this constitution shall be embodied in a set of by-laws hereunto attached.

Article VII—Amendments.

This constitution may be amended by a three-fourths vote of the general staff in a regular meeting, the amendment having been duly proposed one month previously and due notice of the proposed amendment having been announced in the call of this meeting.

By-Laws

Article I—Duties of Officers.

Section 1. The chairman shall preside at all meetings

of the executive staff and general staff, appoint all special committees, unless otherwise provided, and shall call all special meetings. He shall, *ex officio*, be a member of all committees.

Section 2. The vice chairman in the absence of the chairman shall possess his powers and perform his duties, and when both chairman and vice chairman are absent a temporary chairman shall be elected.

Section 3. The secretary-treasurer shall keep a record of the transactions of all executive staff and general staff meetings together with a record of the names of all members present. He shall transmit, whenever necessary, the proceedings of the staff meetings to the board of trustees. He shall notify all officers of the staff and members of the committees of their election and all chairmen of their appointment and shall send them the names of their associates on the committee and the object for which the committee was appointed and shall record the report of each committee. He shall notify all members of each meeting of the staff at least two days before the appointed time stating in the notices the nature of the business for which the meeting was called. He shall keep a record of all moneys received and all expenditures.

Article II—Vacancies.

Vacancies occurring in any elective office shall be filled for the unexpired term by election at the first regular meeting of the staff.

Article III—Meetings.

Section 1. The executive staff shall meet upon the call of the chairman or upon the request of three of its members. The secretary shall present at each meeting of the general staff a report of executive staff meetings, of any advice it has given the superintendent or the board of trustees and of any action it has taken.

Section 2. The annual meeting of the staff shall take place on the second Tuesday of February.

Section 3. The scientific meeting of the staff shall take place on the second Tuesday of each month.

Article IV—Attendance.

Members of the staff shall attend those meetings in which their patients are to be discussed and as many of the other meetings as possible. They shall not, however, be required to give excuses for their absence except when the analysis of the hospital work includes some of their patients. Consecutive absence at three meetings without satisfactory excuse shall be referred to the executive committee for action.

Article V—Elections.

Election shall be by ballot and a majority of those present shall be necessary for election. In the event of their being more than two candidates and no election taking place on the first ballot, the candidate receiving the least number of votes shall be dropped until an election is obtained.

Article VI—Order of Business.

The order of business at regular meetings shall be as follows:

1. Reading of the minutes of last regular meeting and any special meeting.
2. Reading of the minutes of all executive staff meetings during preceding month.
3. Unfinished business
4. Communications.
5. Reports of standing and special committees.
6. New business.
7. Report from medical records department and analysis of the work of the hospital.
8. Presentation of cases of special interest occurring in the hospital.
9. Presentation of interesting pathological specimens recently removed in the hospital.
10. Adjournment.

Article VII—Amendments.

Amendments to these by-laws shall be made by giving notice of such amendments at a regular meeting of the staff. Such amendments shall not be voted upon or considered until the next regular meeting at which time a two-thirds vote of members present shall be required for passage.

Article VIII—Rules.

In order to define and systematize the functions and duties of the staff the following rules are adopted:—

1. The hospital shall treat all diseases except acute contagious diseases.

2. No patient is to be sent to the hospital, except in emergency, without a provisional diagnosis by the attending physician and the consent of the superintendent. In case of emergency the provisional diagnosis shall be given as soon as possible after admission. Physicians shall be held responsible for giving the hospital such information as will enable the administration to protect the other patients from those who are dangerous or who are suffering from a contagious disease.

3. The attending physician shall be held responsible for a complete record of the patient for the hospital files. This record shall include the complaint, present illness, past history and family history, record of physical examination, working diagnosis, laboratory findings, progress notes, treatment, medical and surgical, condition on discharge, final diagnosis and in case of death the autopsy findings when available.

4. Complete history, physical examination and working diagnosis shall be completed within forty-eight hours after admission. Working diagnosis shall be placed upon the chart prior to any operation.

5. All operations performed in the hospital shall be described in full upon the hospital record immediately following the operation. All tissues removed at operation shall be the property of the hospital and shall be examined by a competent pathologist whose report shall form a part of the patient's case record. All material obtained by curetage of the uterus shall be examined with the microscope for diagnosis.

6. The x-ray department and the medical laboratory shall each be under the supervision of a member of the staff who shall be competent in his field as provided in the constitution.

7. Members of the staff shall classify themselves in their respective fields in order that the hospital administration may know the branch or branches in which they are to be considered competent. Members not known by the superintendent to be surgeons shall have a member of the staff who is competent in the field of major surgery, present as operator, assistant or in attendance as adviser at all major operations and who may be called for the patient in case of emergency. In case of failure to comply with this requirement the superintendent shall call upon a member of the surgical staff to act as above required. The superintendent shall be the sole judge of the necessity of such action. The surgeon thus called may collect from the patient in the case of pay patients for such necessary attention. Separate bills and receipts for same shall be sent to the patient in all such cases.

8. In case of complications in the new-born, the attending obstetrician shall call in consultation at once, a pediatrician. If this is not done in a reasonable time, the superintendent shall have the right, for the protection of the hospital and other new-born patients, to call one of the executive staff pediatricians.

9. The executive staff together with the superintendent shall make a list of "rules for interns," which shall include rules regarding the ethical and professional conduct of interns on duty in this hospital and which shall be published as an appendix to the constitution and by-laws. These rules shall be amended and changed only by the above-mentioned persons.

10. A stenographer shall be present at all meetings of the staff to act as an assistant to the secretary, and shall provide the secretary with a typewritten copy of the transactions of the meetings.

11. Unprofessional and unethical conduct, and violations of rules of this staff shall constitute a cause for withdrawal of privileges of this hospital. Any member against whom the foregoing charges have been preferred shall be notified of such charges and shall have the opportunity of appearing before the executive staff in his own defense before final action upon charges will be taken. A two-thirds vote of the staff shall be necessary to expel a member.

12. All members of the staff shall sign the following pledge:—

Upon my honor as a gentleman, I hereby declare that I will not, so long as I am permitted to practice in this hospital, practice division of fees in any form: neither by collecting fees for others referring patients to me, nor by permitting them to collect any fees for me; nor will I make joint fees with physicians and surgeons referring patients to me for operation or consultation; neither will I in any way directly or indirectly compensate anyone referring patients to me; nor will I utilize any man as an assistant as a subterfuge for this purpose.

ARTICLE IX—RATIFICATION.

These by-laws shall come into effect when passed by the staff in regular session and approved by the superintendent and board of trustees. After their approval they shall be signed by each member of the staff as significance of his willingness to abide by them. New members of the staff who from time to time shall be granted privileges in this hospital shall sign these by-laws and shall receive a copy of same. Copies of this constitution and by-laws shall be printed and distributed to the staff.

While commenting most favorably on Dr. Webb's constitution and by-laws of a hypothetical hospital staff, Dr. Frederick W. Slobe of the American College of Surgeons, and Mr. Frank E. Chapman of Cleveland, to whom they were submitted before publication, took exception to two or three sections.

Both Dr. Slobe and Mr. Chapman question Art. II, Sec. medical society a place on the hospital staff. Dr. Webb explains that in Minneapolis, one cannot apply for membership in the county medical society until he has resided in the county for six months and, after the application is filed, it takes another six months to get into the organization. This would exclude a doctor from the hospitals of the city for a full year, unless some provision were made.

Dr. Slobe would like a more definite statement in Art. III, Sec. 2, of how the hospital is to determine who are the "duly licensed practitioners of medicine who are competent in their respective fields and worthy in character and in matters of professional ethics." Dr. Webb agrees with Dr. Slobe in this respect.

Mr. Chapman thinks that Art. IV should be clearer on the point that officers of the staff shall be selected from the executive staff. The author replies that Art. IV is indefinite because the chief of staff and secretary are merely executive officers, and there is no real reason for the officers coming from the executive staff.

In regard to Art. IV of the by-laws, both critics agree that the entire staff should attend meetings in the absence of a reasonable excuse. To this Dr. Webb says: "Many hospitals must make ends meet. If we fire a few men who are otherwise satisfactory, they will go elsewhere. This would not satisfy the trustees and we might find the trustees granting a man permission to practice in the hospital without attending staff meetings. We hope to make a definite rule requiring the men to attend meetings where their cases are up for discussion and the additional requirement that they attend at least one out of three meetings, even though they have no cases under discussion."

Art. VIII of the by-laws on rules, Mr. Chapman feels, is only an attempt to crystallize local conditions and should not be construed as a guidepost for other institutions. Dr. Slobe is not of that opinion and believes that most of the rules are essential for the safe medical and surgical treatment of patients.—EDITOR'S NOTE.

DO YOU KNOW THAT

There are 250,000 patients in hospitals for mental diseases in this country.

Each year 50,000 persons are admitted to these hospitals for the first time.

There are many cases of serious mental maladjustment that never reach these hospitals.

Patients with one type of mental disease alone (dementia praecox) are twice as numerous as persons in all hospitals for tuberculosis.

One man out of every six received in a state hospital for mental diseases for the first time is admitted on account of syphilis.

Over one-eighth of the total expenditures of some states is for the insane.

The expenditures for the insane in some states exceed the amount for any other purpose except education.

The cost of maintenance of persons in hospitals for mental diseases throughout this country is about $75,000,000 annually.

The economic loss to the United States each year on account of mental disease is over $200,000,000.

The number of hospital beds occupied by patients with mental diseases exceeds the number in use in all general hospitals in this country.

Whereas most hospitals for mental diseases are overcrowded, the average daily number of patients in general hospitals is about one-half of the number of available beds.—*Mental Hygiene Bulletin.*

The new nurses' home of St. Anthony's Hospital, Oklahoma City, Okla., plans for which were drawn by Architects Monnot and Reid of Oklahoma City.

LEGAL DECISIONS AFFECTING HOSPITALS

By DOROTHY KETCHAM, Ann Arbor, Mich.

Allows House for County Physician

The supreme court of California, December 18, 1922, held that under the provision of the code authorizing the boards of county supervisors to erect and maintain hospitals and almshouses and "such other public buildings as may be necessary to carry out the work of the county government . . . " these boards have power to erect and maintain a residence and garage for the county physician at the county hospital.—*Forward vs. San Diego County, 211 Pac. 458.*

Lying in Hospital Declared Nuisance

The defendant in this situation operated a general and lying-in hospital. Suit was brought to enjoin its operation on the grounds that because of its location in a residence district, of the near proximity to complainant's residence, and the manner of its operation, the hospital was a nuisance essentially interfering with the complainant's legal rights in the free and unmolested enjoyment of his property. The court perpetually enjoined the defendant from operating in his building a lying-in hospital, and "enjoined him from creating, causing or suffering offensive odors to invade plaintiff's dwelling from his hospital operated as a general one, but declined to absolutely restrain the operation of a general hospital therein. The question submitted to the court of appeals of Kentucky recently was whether under the facts presented, the hospital was a nuisance interfering with the rights of the plaintiff being within from 10 to 20 feet of it.

The court points out that no lawful business or enterprise is ever a "nuisance per se"; that is, a nuisance wholly forbidden by law. "The question in all cases is whether the annoyance produced is such as to materially interfere with the ordinary comfort of home existence. It is not, of course, necessary that the annoyance and discomfort should be so great as to actually drive the person complaining thereof from his dwelling; but if the alleged injury be a plain interference with the ordinary comforts and enjoyments there is a nuisance, no matter how slight the damage, provided the inconvenience be actual and not fanciful. A hospital which is a lawful business may on account of extraneous facts become a nuisance to one within sufficient proximity."

In this case it is pointed out that the shrieks and cries of the patients, the offensive odors from narcotics, disinfectants and drugs made residence in plaintiff's house not only uncomfortable but unbearable. It was pointed out by three physicians that "it was practically impossible to conduct a lying-in hospital without the character of noises testified to by plaintiff and his witnesses—that the general rule with practically all of them (patients in labor) was that from the time of the inception of labor pains until the delivery of the child there are almost constant shrieks and cries which no narcotic could or would subdue." The court held that the lower court did not err in restraining the defendant from operation of a lying-in hospital in his building.

The question which was raised concerning objectionable noises or odors in the operation of a general hospital which would in effect tend to reduce the adjacent property value was not "sufficient in and of itself to create an abatable nuisance." If the nuisance can be shown after its operation then the plaintiff is entitled to a new application for relief. "But it cannot now be granted upon the mere anticipation of such consequences, unless 'the act or thing threatened or apprehended is a nuisance, per se, or will inevitably become such,' and that the anticipated or apprehended injuries will result as a natural or inevitable consequence."—*Emrich vs. Marcicelli, 244 SW 865.*

Compensation for Hospital Service

The supreme court of Oklahoma, December 19, 1922, declared that the industrial commission of the state had no jurisdiction to hear and determine claims for the reasonableness or the unreasonableness of medical or hospital services where the same are based upon a contract between the physician or the hospital furnishing services to an injured employe who was entitled to compensation for his injury under the provisions of the Workmen's Compensation Law of the state and the employer.—*Western Indemnity Co. vs. State Industrial Commission, 211 Pac. 423.*

Church and Corporation Separate Entities

The distinction made in the following case by the Massachusetts supreme judicial court, January 4, 1923, is significant in some of its points, although the selection of policies is not of importance here.

The suit was brought in equity by members of the First Presbyterian Church of Brookline against the religious society incorporated under that name and certain persons members and trustees of the body. The court points out that "the corporation was the legal entity which held the title to the real and personal estate used for worship and other religious purposes in the absence of express provisions to the contrary. The church was the body of communicants gathered in the church membership for the celebration of the Lord's Supper and for mutual support and edification in piety, morality and religious observances. The corporation and the church, although indissolubly associated, were nevertheless separated by this distinct line of demarcation. The practical result of this principle was that in the case of disagreement between corporation and the church the power of the corporation prevailed."—*McNeilly vs. First Presbyterian Church in Brookline, 137 NE 691.*

Detached Property Held Taxable

The supreme court of Minnesota, January 12, 1923, passed upon the exemption of the property of colleges which is reasonably necessary for educational purposes. The same exemptions applied to institutions of learning ordinarily apply to hospitals and charitable institutions. One point related to the use of eighty acres, located about two miles east of the college grounds and held not subject to taxation. "Its proximity to the main buildings of the institution is not such as will lend itself readily to serve any apparent present purpose. Its use does not seem reasonably necessary. In a sense there is not a marked difference between an endowment fund of a college, the profit or interest of which goes to its support and farm land acquired with such a fund and worked with a view to help support the college. But in one case it was taken for granted that lands stand on a different

footing from endowment funds. The distinction is said to have become established—where a farm owned by the institution (St. Barnabas Hospital) and leased, the rent going to maintain the hospital, was subject to taxation. For instance, the investment of endowment funds in land for business or speculation profits by an educational or charitable institution may be regarded as withdrawing such land from the legitimate purposes of the institution and subjecting it to business competition, and the usual hazards of business, including taxes. Again, there is the hazard of loss of capital in business that endowment funds provided by private benevolences should not be subjected to. We think the court right in holding taxable this distant, detached, eighty acres, the use of which does not appear to be reasonably necessary for the purpose of the college."—*State vs. Carleton College, 191 NW 400.*

Tax Exempt Even if Title Was Not Clear

A recent decision of the supreme court of Illinois upholds the exemption from taxation of certain property used exclusively for religious purposes although the payment for the property was not yet complete and the note, contract and legal title were in other hands.

Under the statutes and constitution of the state, the court reviews amendments and holdings, demonstrating that "the only constitutional limitation on the power of the legislature to exempt property used for religious purposes is that such use shall be exclusive, and ownership of the property is not a condition."—*People ex rel Bracher vs. Salvation Army, 137 NE 430.*

Executors of Bequest Given Leeway

By will, the real, personal, and mixed residue of the estate of a Dr. Young was bequeathed "for the purpose of establishing, building and equipping a public hospital in the town of Fairfax for the treatment of white and colored patients" and certain executors named were to carry out the provisions of the will according to their best judgment. An action was brought before the courts and passed on by the supreme court of South Carolina, November 14, 1922, alleging that the executors did not carry out the provision of the will and that it would be improper for them to do so without first obtaining from the court a construction as to its meaning and validity; further the will was declared too uncertain to be effective. A very excellently prepared brief reviews the findings of facts, the discussion and conclusions of law. This will be reviewed briefly only because it is the most recent of the cases construing the points involved with care and great detail.

First of all it is shown that Dr. Young created a charitable trust by the establishment and equipment of a public hospital. The doctrine of charitable trusts represents a good deal of conflict of authority but in South Carolina it seems to be the settled rule that the intention of the testator must be found in the words used by the testator and the testimony of previous oral declarations as to his intention cannot effect the construction of the words used by the testator in his will to express his intention. It is shown that "the founding and maintenance of hospitals and asylums of various kinds, and homes for destitute and friendless children, and the aged and infirm, constitute charitable uses or trusts, and bequests, devises, or other gift for such purposes will be upheld in equity with a strong hand." Trusts for such purposes may be established and carried into effect, when, if not of a charitable nature, they could not be supported. A public charitable trust is defined by Pomeroy 2 Equity 1018. "It is an essential feature of public or charitable trusts that the beneficiaries are uncertain, a class of persons described in some general language, often fluctuating, changing their individual numbers, and partaking of a *quasi* public nature."

It is then contended that since it is a public charitable trust to establish, build and equip a public hospital, can such trust be carried out? It is shown that not only is a public charitable trust plainly intended and expressed, but full power and authority are vested in certain persons to execute the trust. The fact that no fund was provided for the maintenance and operation of the hospital does not destroy the validity of the charitable trust, if it is otherwise valid. It is sufficient to say that the establishing, building and equipping of a public hospital in a town, is in itself a valid public charity. "The fact that, after the erection and equipment of the hospital, patients might be required to pay for treatment does not deprive the institution of its character as a public charitable hospital. It has been frequently held that the fact that pay is received from patients does not deprive a hospital of its character as a public charity."

The court agrees with the discussion adding: "While the residuary estate is not bequeathed and devised to any particular person in express terms, the setting aside of that estate for the purpose declared, coupled with the express direction of the executors to carry out the provisions of the will relating thereto, constitutes a vesting, by implication of the estate in the executors charged with the expressed trust."

The fact that the trust is defined as a "charitable trust" does not mean that the benefits thereof are to be enjoyed gratuitously. "The will provides for the establishment of 'a public hospital,' in the ordinary management of which, necessarily, charges for services rendered are made." The public hospital is ordained to be established "for the treatment of white and colored patients. The provision for gratuitous treatment is conspicuously absent. The absence of a provision for the maintaining of the hospital is inconsistent with the purpose that the treatment should be free and consistent with self-support."

"The executors are authorized and empowered to establish, build and equip a public hospital; no direction is given that they shall operate. The executors are directed in the execution of this trust to exercise 'their best judgment,' and if in that exercise it should be deemed most expedient—not only to build and equip the hospital, but to organize an executive force to operate and manage it, such power would be easily implied in the duty of an establishment. The operating organization, through the formation of a society, association, or corporation could be referred to that duty." The executors were justified in taking into consideration the size and health needs of the town, and in providing for a deficiency fund.—*Harter vs. Johnson, 115 SE 217.*

WHERE CREDIT IS DUE

In publishing the photograph and floor plans of the Pinkham Memorial Clinic for Babies at Salem, Mass. in the March building and equipment number, no credit was given the *Architectural Forum* for previous publication. This occurrence was due to an inadvertence, which is regretted.

A man is relieved and gay when he has put his heart into his work and done his best; but what he has said or done otherwise shall give him no peace.—Emerson.

A FREE HOSPITAL PATIENT

By EDITH LIVINGSTON SMITH, Lyndeborough, N. H.

"NOW Ruth an' Omie, you shut up. The sociable worker lady sent a postal to me that the doctor at the hospital wants t' see you tomorrow mornin' at 8:30 sharp, an' that means we've got t' git up at five an' yer must git t' bed now to be out of the way while I wash yer clothes."

"I don't wanter go t' bed," wailed the twins separately and collectively, "it ain't supper time yet."

"Who said it was?" snapped their mother. "Yer pink dresses are dry now but who do yer spose 'll wash the rest o' yer things by moonlight? Keep still now lest yer wake the baby, she's sleepin' overtime. Ef yer talk low yer ken play with the clothes pins an' make em into dolls, but hop into yer nighties now so I ken git them clothes into the tub quick."

It was four o'clock of a warm afternoon when I stood on the threshold of the Wilkins' furnished room, unobserved for a breathless interval while I obtained the above confidential information; then, as my presence became known to the thin little woman standing by the wash tub, the scene shifted; the curtain rose on what is glibly called "a family problem." Enter: the "Sociable Worker."

The room was a fair size furnished as only an orthodox furnished room is ever furnished, when Neatness and Shabbiness find the common denomination of Dreariness, and Dreariness equals a "home" at $5 a week.

Against one wall was a double bed; on the other side of the room, a cot which could, as Mrs. Wilkins told me, "collapse into two" and on this sat the sulking twins, aged seven. In one corner of the room near the window was a wet wash basket where a baby lay, sound asleep. The table by the sink held a portable gas stove, by the window stood the wash tub placed upon two chairs. The view through the window showed the fire escape and a roof beyond, also the above mentioned pink gingham dresses dangling cheerfully in a fitful breeze.

Mrs. Wilkins rushed to greet me.

"Oh I'm so glad you've come," she began. I'm so t-i-r-e-d an' discouraged. Sit down, please, an' don't mind nothin'. I—wish—I was dead."

She sat down suddenly on the edge of the bed and her pale blue eyes filled with tears.

The twins looked scared. The baby stirred in the blanket. I looked at the tell-tale post card on the draped mantel shelf resting against a sea shell and felt regret that it could not help me bear the responsibility. The hospital admission cards of blue cardboard glared at me from the frame of a cracked mirror.

"Mrs. Wilkins," I began hurriedly to gain time. "I didn't know you had a baby? I thought the twins were your only children. What a funny name 'Omie' is, I never heard it before."

"It's in the Bible," she wiped her eyes and looked at me reprovingly,—"Ruth an' 'Omie,' you must hev heard it."

"Oh, of course," I acquiesed meekly.

"The baby ain't mine," she went on. "It's name's Cornelia Hoover Jones, 'Corny' fer short. Mis' Jones lives on the top floor when she's home but she's to the City Hospital now. She fell down stairs an' broke her leg. It was hard on her 'cause her husband's in jail jest now an' her with five kids. Her sister in the country took two and a lady friend took Dora (she's awful cute), the landlady's mindin' Iris (she's old enough t' wash dishes some), an' I took the baby 'cause its littlest an' don't eat much. Mis' Jones took it to the milk station once an' they wanted her to feed it on a fermaldyhyde but while it's here it's got t' drink condensed milk 'cause it's all we've got. It's an awful good baby an' it's company fer the twins."

"I see," I said a bit helplessly. "Has Mr. Wilkins got a steady job yet?"

"On an' off," she said hopefully.

* * *

The week before Mrs. Wilkins had borrowed a dollar to come to the out-patient department of the hospital. She paid for admission for herself and the children and for some of the medicines needed. Mrs. Wilkins' maladies were like the fourth dimension. "Her man" belonged to a union but work was slack and they had fallen behind. They owed the grocer ten dollars, the landlady would "say nothin' though they owed her for two weeks' rent because they had always paid before." This much and more I learned before I left.

Mrs. Wilkins' folks were better off than Tom's but never, never would they find out she wasn't prosperous. I needn't think they had always been in this fix. They had a nice home once but Tom got in bad company and had gambled some and had took a glass "where he could find it." Now he had hit the trail so things were goin' better if it wasn't for all this sickness. No, they'd never asked fer charity—she'd be dead first. She had put the salve on Omie's face and stopped givin' her pickles an' sech—it's comical actions didn't jest agree with fried foods, the doctor said. Tom was scared to death when he heard Ruth must have an x-ray. Did I think she'd ever swallowed a safety pin or what was it for?

"And about yourself, Mrs. Wilkins, Do you feel any better since taking your tonic?"

No answer. She took the kettle off the gas stove. Would I be offended if she made me a cup of tea. Would I drink it, please?"

"Yes, I would love it, but how about your tonic?"

"I didn't git it," she said defiantly. "I'll bring the twins to the hospital but yer needn't ask me to come fer myself fer I'm not the grafter yer take me fer. I'll not come till I ken pay as I go." She faced me accusingly with heightened color as she tucked up a loose lock of hair.

"Mrs. Wilkins," I said, equally determined. "Please come to the hospital tomorrow. The doctor wants you to. Ruth must have her x-ray and Omie is to see about her adenoids. Now, promise me you will do it right. (I took the tea cup from her hand.) I know you can't afford to pay for everything just now but you are not to worry one bit. Why the—the superintendent of the hospital *likes* to give you things free."

I swallowed the tea and the statement together and prayed that neither would choke me.

* * *

The next day I shamelessly asked the superintendent of the out-patient department for free admissions for

three stiffly starched Wilkins. (I was sorry they looked so clean but as a social worker my veracity stood the test—they could not pay). Tom had stayed home from the precarious job until eleven o'clock to "mind the Jones baby."

"He's goin' t' work a half day," Mrs. Wilkins told me, "an' I guess the baby'll be all right till bottle time, but he don't know how to fix the condensed milk. Men are awful helpless."

"It is good of him to 'mind' a borrowed baby," I said vigorously. "It's *most* unusual."

"That's the kind Tom is," Mrs. Wilkins agreed as we climbed the stairs and she sorted admission cards and twins, and this I took to be a compliment for the reformed.

But one thing I knew, even if Mrs. Wilkins did not; I knew the intricacies and delays of out-patient clinics and I hoped for harmony between Tom and the baby, even beyond condensed milk time.

Through a busy morning the Wilkins were a subconsciousness in my mind. Mrs. Wilkins began in one clinic and must be referred to another. Ruth must be piloted from the children's department to the x-ray and pacified while the engine took a "moving picture" of her. Omie refused to be left without her mother and at two minutes of twelve went to see about her adenoids. At 1:15 the family assembled with six prescriptions. Omie's foretold the future and was the worst. It said to come another morning at 8:30 "without breakfast" and to bring $3.10 for she must stay in the hospital overnight and have her tonsils removed.

What was I to do? What would any "sociable worker" do? I did it, and the superintendent sighed but was kind.

In spite of this full hand of trumps I left an exhausted Mrs. Wilkins and fussy twins waiting for medicines on a bench when I went for my lunch. Her thanks were genuine for my piloting, but my thoughts were with the husband, and I felt sure that the borrowed baby would be demanding condensed milk in no uncertain voice.

That was only the beginning of the Wilkins family. Every thing was wrong with their health that could be wrong. There was free dentistry, free medicines and the inevitable free admissions.

Finally came a day when my hand was stayed in writing a request for "free admission."

"Don't you bother," Mrs. Wilkins said encouragingly. "I got the medicines charged last week an' I paid the cashier for 'em today. Tom's workin' steddy now. We paid most o' the grocery bill an' the landlady give us a present of one week's rent. You'd laugh though ef I tell you the thing I like best about hevin' some money: I bought the twins some extry clothes this week so I don't hev to wash their pink dresses so much. I bought Cornie a cute cap too an' some ribbon fer strings. Her ma's comin' home tomorrow. No you don't need to give us nothin' more free. The hospital's been awful good an' hasn't rubbed it in a bit about our bein' poor. I don't know ef it will help yer any but I tell everyone I see t' come to this dispensary."

I threw the free admission slips into the scrap basket.

"Mrs. Wilkins," I said and visions of the fire escape rose before me. "I don't see how you keep the twins so clean and shining and sweet. You are a wonderful woman."

"Oh!" Mrs. Wilkins paused. "There's a lady next door. She's spent all her money on an optimist doctor, the kind that rubs yer back bone. She thinks she's better but she'd like to try both kinds at once. I'm goin' t' bring her to the hospital tomorrow. She's in an awful fix, nobody much workin' an' a whole bunch of troubles. Don't let on I told you she was poor. She's kind o' proud an' it would hurt her feelin's.

"I'll pay fer her."

COOPERATION BETWEEN DOCTOR AND HOSPITAL SOCIAL WORKER

Psychiatrists have been the first among medical men to recognize the importance of social service, says Miss Jessie L. Beard in an article on the inter-relationships of social service workers and the medical profession in a recent issue of *Hospital Social Service*.

"Recently psychiatrists, after recognizing the assistance social service renders their specialty, have analyzed its functions, prescribed activities and outlined and directed the training for pyschiatric social service," says Miss Beard. "In cooperation with national and the several state mental hygiene committees, they have been largely responsible for the rapid growth of social service in the hospitals for mental diseases, throughout the United States. Without doubt, the social factors peculiar to psychopathic case work have created an unusual opportunity for social workers. But outside of this important field, medical men in general have had but a lukewarm interest in social work."

But granted that many doctors are not socially-minded, says Miss Beard, it also is true that many social workers are not medically minded. As the hospital social worker is a newcomer and more or less a guest of the medical department, it is incumbent upon her to consider the criticisms made by the doctors. Two criticsms which have often been directed against the social worker and which can be remedied are: (1) wasting time on non-essentials, and (2) and a lack of general knowledge.

Under the non-essentials, Miss Beard makes a specific instance of the more or less common practice of planning Christmas celebrations and thus demoralizing the work of the department during the entire month of December. Such work contributes little to the hospital and to community health. Then there is the question of dispensing free milk. From this it is only a step to non-medical relief and the hospital social worker is encroaching upon the field of other agencies.

It is not unusual for the hospital social worker to lose sight of the community aspects of a case in her concentration on an individual problem. Too frequently her medical knowledge is very slight, and the doctors with whom she deals do not care to be instructors, especially of rudiments.

"Hospital social service," Miss Beard concludes, "has been organized primarily to promote accuracy in medical diagnosis and adequacy and permanency in treatment. The medical department forms the keystone to the hospital arch, as the institution's very existence is dependent upon the skill, interest and good will of its doctors. It is very important that harmonious relations be promoted between doctors and social workers, a conspicuous example being seen in the field of pyschiatry."

"Here's to laughter, the sunshine of the soul, the happiness of the heart, the leaven of youth, the echo of innocence, the treasure of the humble, the wealth of the poor, the bead in the cup of pleasure. Without it humor would be dumb, wit would wither, dimples would shrivel. It dispels dejection, banishes the blues and mangles melancholy, for it is the foe of woe, the destroyer of depression, the birth cry of mirth and the swan song of sadness."

LANDSCAPE GARDENING FOR HOSPITALS

By JENS JENSEN, Landscape Architect, Chicago.

IN DEVELOPING the plans for landscaping the Henry Ford Hospital grounds, Detroit, some things were jotted down in the writer's memorandum book as the foundation or motives on which to build the structure.

The fact that beauty is a splendid antidote for the sick, need not be emphasized here, but the knowledge that beauty out of doors as well as in the rooms might be enjoyed by the patients, is of great importance. Design can exert a strong influence on the mental attitude of the suffering, and with this in mind the crude outlines of a design for the gardens eventually grew into a finished product.

First thought was given the patient indoors. Large groups of flowers have been brought within a certain distance of the building so that patients who are able to sit up can get full enjoyment from them. These groups were not placed in scattered beds but were surrounded by a border of green, or better, enclosed by a border of shrubs able to produce light and shade as the sun changes its position in the heavens, thereby adding to the patient's interest as he observes them from day to day.

For those unable to leave their beds, picking gardens have been provided so that the flowers may be carried into their rooms and in that way give pleasure and joy. Of value and interest to those confined to their rooms is the beauty of the whole garden as looked down upon from above and the variety of planting material with its beautiful flowers and berries.

Birds Are Courted

Birds have been considered in the same way as the flowers and they have been provided with plants that feed them and furnish suitable nesting places; they also have nesting houses and drinking fountains. The voices of song birds in the still atmosphere of the hospital should not be undervalued. Especially are they a revelation to the city dweller who knows little or nothing of their habits; frequently songsters bring new interest to such persons, an educational interest that will endure throughout life. By those who may move about in the sick room,

Landscape plan of Henry Ford Hospital grounds, Detroit.

the birds may be seen splashing in the pool, perching on the limbs of trees and shrubs or busily flitting about feeding their young ones. It often is a new world for the city man and one worth while to live in during a time when he has little to think about except his illness.

their sweet perfume from a seat close by, walking through a shady lane, listening to the birds, or simply enjoying the exclusion of the city. The pools with the gold fish darting about, the dragon flies skimming the water and the beautiful water lilies smiling in the sunshine are

A glimpse of open lawn surrounded by hidden nooks and flower bayous.

Large trees, such as elms, have been planted to give shade at certain hours of the day and to bring the green lacework of their tops closer to the hospital rooms and their occupants, and along with them the bird life that exists amongst them. These trees also have been planted for another purpose: that of bringing out the architecture. Architecture needs this kind of ornamentation to emphasize its beauty, and this has its value not only to the passerby, but to the convalescent who is able to move about the grounds.

something that, of course, cannot be brought to the sick room and can only be enjoyed by the convalescent. The pool has a little rock cliff where rock plants, that delight in their barren situation, grow and give interest and variety to the garden. Iris and other moisture-loving plants fringe the pool, softening its stony edges and enlivening the little water scene with their beautiful green and their interesting flowers. A small waterfall adds a musical note, provides the fish with fresh water and keeps mosquitoes away.

Nothing is so fascinating as an artistic pool. This one, flower-bordered and with small rock cliffs, is well stocked with gold fish.

Viewed from the sick room windows, these garden probably give as much beauty and pleasure as they do to those who can enjoy them by walking about. Of course, to the latter they become more intimate. Here patients may enjoy the flowers directly in front of them, inhaling

A bird pool surrounded with ferns and virgin bower presents an interesting spot in the garden. From a nearby seat, the birds in playful mood may be watched as they take a bath.

Stepping stones to preserve the turf are provided where

walking may become too concentrated. In other places, stepping stones are used for utilitarian purposes so that the gardener may water or weed the flowers without tramping on the beds.

At Henry Ford Hospital there is an open lawn surrounded by hidden nooks, pools and flower bayous. Event-

Stepping stones help to preserve the turf in places where walking is apt to become concentrated.

ually this will represent a garden, not of stiff and formal expression, but of poetic charm and beauty—more like a bit of country, with all its mysteries and its food for imagination carried into the heart of a great city.

Kitchen Garden Interests Convalescents

Another thing that received consideration was the kitchen garden, planned not so much as a supply garden as a place where patients might see things grow. Many city folks are so stupid about growing things that the designer thought convalescents might appreciate this opportunity. A kitchen garden, if well designed, is a beautiful thing, and, to most of us, it is an interesting place where we develop our skill in producing the best from our efforts. Here grapes or dwarf fruits that need the skillful knife may be grown, as well as all kinds of vegetables for the kitchen. It is splendid to promenade under the shade of plum or cherry trees in full bloom, or filled with delicious fruit. Hospitals advantageously situated might well have sufficient room for the cultivation of all their supplies. Most hospitals, however, and especially those in the larger cities cannot avail themselves of sufficient space, but they may do as has been done at the Henry Ford Hospital, set aside sufficient space for intensive cultivation of fruits and vegetables in a small way, partly for food supply, but largely for the interest it gives convalescent patients.

The designer also set aside space for two tennis courts for the nurses.

In conclusion it will be well to emphasize the necessity for good soil in which to grow the plants. It took a great amount of money to provide the necessary fertile soil for the Henry Ford Hospital garden, for it is useless to build a garden in excavation or building rubbish. A dollar spent on black soil is ten dollars saved on the tree.

NEGRO VETERANS' HOSPITAL OPENS

On a spot made memorable by the life and works of Booker T. Washington at Tuskegee, Ala., the government of the United States on the anniversary of Lincoln's birth dedicated a $2,000,000 rehabilitation hospital for Negro veterans of the World War. All classes of cases will be given treatment at this new Veterans' Bureau institution.

Vice President Calvin Coolidge attended the opening of the hospital and was the principal speaker.

DEMONSTRATION AT BELLEVUE OF OUT-PATIENT PEDIATRIC SERVICE

The section on pediatrics of the Associated Out-Patient Clinics of New York, including a representative of the professional staff of each of thirty-seven pediatric clinics of the city has, through its executive committee been actively engaged in working out plans for aiding and improving out-patient service in pediatrics. The section agreed that the professional staffs and governing authorities of the pediatric clinics would be stimulated by the existence of an approved standard, and by comparison of existing clinics with this standard. As a first step towards this end, requirements for an out-patient service in pediatrics were formulated.

These requirements were submitted in their first draft to various interested individuals for criticism, and after revision were finally adopted by the section, and later authorized by the association. The standards are published in the current number of the *Archives of Pediatrics.* They are not regarded as in any sense complete or final, but as a working basis.

During the summer of 1922, the member pediatric clinics were visited, and their organization and methods compared with these standards. The survey showed that several clinics in New York City closely approximate the standards set by the section; that others are conducting pediatric out-patient service of a superior grade; but that many clinics have unsolved problems of organization and management, and that some fail to meet essential requirements. When informed just how their clinic work compared with these standards, both medical and administrative authorities of the institutions visited were usually much interested, and plans for improving service are already under way in several institutions.

The section also decided to select one institution in which could be demonstrated well-rounded service in pediatrics; and after a study of the various clinics of New York, because of the excellence of its out-patient department, the children's medical division of Bellevue Hospital was chosen.

At Bellevue a demonstration of complete unity between the in-patient and out-patient service will be made possible by improvement of record transfer between ward and out-patient department. Through the employment of a part-time admitting physician, improved methods of admission and distribution of patients (especially the control of contagious disease) will also be worked out. An appropriation from the Committee on Dispensary Development of the United Hospital Fund has been made to meet extra expenses involved in the clinic for this year.

The demonstration at Bellevue began February 1, and its results will be closely followed by the section during the year.

The executive committee is also working on a plan for the study of results in pediatric out-patient service, and is at present trying out a tentative plan of study in three representative clinics. The aim is self-analysis: to determine to what extent the clinic work is not effective, why, and how its effectiveness can best be tested at periodic intervals.

Further reports of the demonstration at Bellevue, and the plan for studying results will be published from time to time so that the work may be of value to those interested in pediatric out-patient service.

Things well done and with a care, exempt themselves from fear.—Shakespeare.

SOME NOTES ON THE RELATION BETWEEN THE MEDICAL PROFESSION AND THE HOSPITAL*

By GEORGE F. STEPHENS, M.D., Superintendent, Winnipeg General Hospital, Winnipeg, Canada.

EVERY member of the medical profession by very nature of his education has been closely associated with a hospital. With some, it is only an occasional contact; with others, the hospital plays a very important part in their practices; and many are dependent on the use of the hospital to a very large extent for their income.

Naturally, certain of the writer's remarks, which may almost amount to criticism, are colored by the management point of view. When one sits daily in a position where there is more or less constant criticism one welcomes an opportunity not merely to answer back, but to show that there is at least another side to some of these questions. The form of management of the hospital is not of such great importance as the way the management manages. It must be such that the personnel, whether an individual, a board of trustees, a commission, or a sisterhood, will be thoroughly conversant with the medical requirements of the hospital, with the needs of the community the hospital serves, and with the purely business aspect which must be considered.

The management, whatever form it may be, has a very definite responsibility to insure the public that for every dollar spent full value is received in terms of service. From time to time there has been agitation for staff representation on the board of management. Most of the large hospitals do not have this, unless, as in some cases, the staff members represent more than the mere fact of their professional qualifications; for example, dean of the medical faculty, medical officer of health, etc.

Manager Needs Medical Viewpoint

While a number of hospitals still have some sort of medical representation on the board, this frequently is not a live question; in fact, in many places, the thinking members of the profession have realized that it is not desirable to have such representation, always provided that the management is kept fully advised as to medical opinion and the medical requirements of the hospital. Where a superintendent has medical qualifications, either doctor or nurse, this should not be difficult, but those institutions having a purely business management, which has not attained the medical viewpoint, are apt to meet the most difficulties. This is not said in any spirit of criticism of the lay superintendent or business manager, but to point out the additional difficulty that must be faced and overcome.

Why does it cost so much to treat a patient in a hospital? This question comes from various sources, from the public which is asked to subscribe funds or pay in the form of taxes, from the patient who is asked to pay the hospital bill, from the management which must find the money, but perhaps more insistently than from any of the above sources, the question comes from the doctor, who has none of these things to do. Sitting as a recipient of comments, complaints, and criticisms incidental to the operation of a large hospital, the writer is amazed at times at the wholesale condemnation that arises out of specific instances only, from a class of men whose whole training has been along accurately scientific lines and who are taught never to generalize from individual cases. One of these statements is "Your charges are altogether too high; the hospital gets all the money and there is nothing left to pay the doctor." Now the latter half of this statement may be correct in many cases, but, speaking for the hospitals, the reverse is often the case, and the patients put forward as their plea, the fact that they cannot pay the hospital because the doctor "got there first."

Doctors are demanding for their patients the very highest type of service that can be obtained—they should not be satisfied with less—and it is the duty of the hospital as far as possible to provide that service. But this costs money. Many cases could be cited in hospital costs, but one example will suffice. Physicians demand a more stabilized nursing service. Nurses are being changed too often. This is true, yet in any good school, (and it is only good schools which give an adequate education to their pupils that are getting sufficient applicants at the present time,) pupil nurses must be moved about in order to give them all 'round training and experience. How then can this stability be obtained? Only by the employment of graduate nurses in charge. This will increase the cost of caring for each patient on that ward anywhere from 7½ cents to 25 cents daily. Similarly, with laboratory and x-ray facilities, operating room, sterilization, food service, etc.

Should Limit Cost of Laboratory Work

One of the most important questions that is agitating both the profession and the hospital is that of furnishing an adequate hospital service at a moderate price so that patients may be self-sustaining, yet not financially crippled after a prolonged illness. Some advocate a limitation in the amount charged the patient for special examination, particularly where several are necessary; this might be applied particularly to laboratory and x-ray work. In the case of the laboratory, and this is dealing with pay patients, it has been our unfortunate experience at Winnipeg General Hospital that, where no fee was charged, such a large number of unnecessary examinations was ordered that the departments could not cope with the work. The fact that this condition existed a number of years ago does not necessarily mean that it exists today. The writer's opinion is that with the cooperation of the doctors the cost of the purely laboratory work which is essential to the interest of the patient should be reduced to a minimum. Laboratories must be kept up, staff paid, equipment obtained, so that income from some source is essential. In a number of hospitals it is the custom to charge a laboratory fee of $2 or $3 to every patient admitted; there are then no further charges for this type of work. In the x-ray department such an arrangement is not easy to carry out in view of the number of private x-ray plants and the very heavy cost of operating such a department.

Carrying on this argument as to the limitation of expense, it might also be applied to the patient's hospital maintenance. This is the crucial point and one that is difficult to solve. Without question pay patients should be self sustaining (one cannot go to the public and ask for money to make up deficits for this class of patient) and yet to make these patients self sustaining in a hospital not

*An address delivered before the Winnipeg Medical Society.

heavily endowed the charges may be such as to cause a real hardship. It has been argued and the argument is reasonable, that private accommodation in a hospital may be likened to that of a hotel, and that the charges are much less for equivalent accommodation in the hospital, without taking into consideration the additional care received. This is so, but the public cannot see the point; the majority of persons who go to a hospital do so because they have to and have not had time or are unable to make the requisite financial provision, whereas in a hotel, the traveller as a rule has plans made and is taking the trip voluntarily.

Must Make Profit on Private Service

It is the generally accepted principle that a hospital is quite entitled to make a fair profit out of the private service, if such profit be applied to the general operation of the hospital. The occupation of a private ward as a rule is optional, and while it may be desirable to many patients to have a single room there are others where the results of treatment seem to be just as good in the two-bed or even larger wards. Frequently the use of a private ward is a case of false pride, and timely representation on the part of the attending doctor would often save the patient a great deal of money. Similarly, in the case of special nurses, while necessary in many cases, and desirable in others, the employment of a special nurse is often merely because "such and such a person had one when in hospital and I want the same."

Those doctors who oppose the practice of making a profit out of the private wards, and who believe that each class of patient should pay for itself, should consider the accepted practice in medicine which has been reiterated from time immemorial. They are doing free work and they must make their profit out of those who can pay. No doctor can deny that if he were paid for all he does his fees would be reduced in the individual case; similarly with the hospitals—so long as the statutory allowances for public wards are insufficient to meet the high cost of hospital service, so long will there be deficits. These can partially be made up from grants and subscriptions but that is not sufficient. Grants and subscriptions, however, are not forthcoming here for the private wards. Only private philanthrophy, which is not evident yet on a large scale, would provide funds to enable these services to be given at less than cost. In some of the larger hospitals in the East and South, our counterpart of the $3 to $4 accommodation, which is open to the general profession and where they may charge fees, is not available. A great deal of that equivalent work is being done in nursing homes, the expensive private rooms in hospitals, or what is still more frequently the case, in the general wards of the hospital where charges of $2, $3 and $4 per day are made but where the doctor is not allowed any fee.

How the Doctor Can Help

There are many ways in which the doctor can help the hospital and, incidentally the patient, aside from purely professional means. For instance, before sending a patient for admission, particularly when accommodation is at a premium, he may find out if there is a bed in the class desired. Patients frequently come in saying that the doctor promised them a private ward, when no private rooms are available. The doctor may send in orders for the immediate care of the patient, if he is not coming to the hospital at once. It is desirable, though this may be disputed, that he should make some inquiry into the financial condition of the patient and give him an indication of what expenditure he must be prepared to face. It will be in the interest of the patient to tell him that the rule in practically all hospitals requires payment or guarantees in advance.

There are many patients who should not be approached with regard to payment by the hospital authorities, yet some provision must be made. In spite of the accusation that hospitals are mercenary one institution of which the writer knows has at present on its books outstanding bills amounting to $25,000 against private and semi-private patients.

Doctors should try to take a few minutes longer in making their rounds, whether they have one or one dozen patients in the hospital. One common complaint is "the doctor seemed in a hurry and was not interested." Very many complaints could be rectified at once if brought to light. In other cases conditions of treatment may give rise to very real dissatisfaction which may be only the result of a misunderstanding. The following is an example and not a unique one: A patient was very loud in his condemnation of the food and the profit the hospital was making out of him. He was on a low and carefully measured and prepared diet, a diet that took the dietitian almost two hours daily to prepare. In this case the attending doctor had never mentioned to the patient that his food was being restricted and the whole blame, as usual, was thrown on the hospital.

It is a good practice for doctors to take a few moments to inquire if their patient has slept, and if not to learn the reason. Is the bed long enough? Should he be moved to another part of the ward where it is quieter? Is he taking his meals, and if not, why? The physician may say these things are the duty of the nurse; so they are to a certain extent, but he also is interested in a good result and is being paid for his services. Is the patient getting the medicine ordered and at the right time? Errors and omissions do occur and are worthy of checking up. Is the patient to require morphine or a 217? If so, the doctor should leave orders to provide for this eventually and not rely on the intern on call who may know practically nothing about the case. The doctor should not give instructions to the patient about the case and forget to tell the nurse; the patient believes the doctor and blames the nurse for not carrying out orders. Nor should the doctor promise the patient that visitors can come in at any time in contravention of the hospital rules; these rules are made in the interest of the patient and, while elastic, they must be enforced.

Above all, whatever hospital the doctor is connected with, he should make his complaints inside instead of outside. He cannot condemn one hospital without reflecting on all hospitals; he cannot condemn hospitals without affecting himself and his profession. The result may not be immediate, but in many instances the memory of the public is long and in later years when having need to use a hospital, it will remember the doctor's criticism and it will add one more pilgrim to the list of those who go to distant shrines.

NATIONAL HEALTH COUNCIL ELECTS

Dr. Lee K. Frankel was elected chairman of the National Health Council at its annual meeting in New York in January. He succeeds Dr. Livingston Farrand. Dr. Frankwood E. Williams, medical director of the National Committee for Mental Hygiene, was named vice chairman, the post held by Dr. Frankel. The new secretary of the council is Dr. S. J. Crumbine of the Kansas state board of health. Dr. William F. Snow, director of the American Social Hygiene Association, was reelected treasurer.

LIBRARY SERVICE IN A TUBERCULOSIS HOSPITAL

By LOUISE SINGLEY, Library Supervisor, U. S. Veteran's Hospital, No. 55, Fort Bayard, N. M.

IN SPEAKING of the value of books to the patient suffering from tuberculosis one physician has said: "To the tuberculous patient, there is nothing that will more quickly bring the mental poise necessary to complete a cure of his disease than good books, well read."[1]

Dr. Charles W. Mills in an article the *Journal of Outdoor Life*, entitled "The Fourth Dimension," compares the factors in the treatment of tuberculosis to the theoretical geometric dimensions of the world. Briefly, he states that the three tangible dimensions of the cure used in all cases are rest, air and food. In selected cases, other things like sunshine treatment, drugs, etc, are an important factor, but the three fundamentals, rest, air, and food, are the definite length, breadth, and height of the cure. But it is the intangible fourth dimension, much more definite and evasive, much more difficult to acquire, that he points out as of infinite importance; that is, the "mental poise" of the patient. To acquire this he advocated the adoption of some hobby or hobbies.

Reading Lessens Patients' Introspection

So it is, that the librarian sees with the physician that the tuberculous patient,—just as Kipling so cleverly places the matter before the children,—must avoid getting the "Camelious hump" that comes from having to little to do. Otherwise, his "Camelious hump" will develop a fine case of introspective blues and self-analytical quirks, that all the medicine plus the three tangible fundamentals, rest, air, and food, will prove powerless to overcome.

As a striking example of powerful, joyous, conquering spirit, the librarian in a tuberculosis hospital cannot help but point to Robert Louis Stevenson (twenty years a tuberculosis patient) who in his essay "Enjoyment of Unpleasant Places," says:

"We see places through our humours as through differently colored glasses. We are ourselves a term in the equation, a note of the chord, and make discord or harmony almost at will. There is no fear for the result, if we can but surrender ourselves sufficiently to the country that surrounds and follows us, so that we are ever thinking suitable thoughts or telling ourselves some suitable sort of story as we go. . . . To travel hopefully is better than to arrive—the true success is in the labor."

It is the librarian's great privilege to help in the development of more types aspiring to the heights of self-control evidenced in such men as Robert Louis Stevenson, Sidney Lanier, John Keats, John Wesley and Dr. Trudeau (all of whom suffered for years with tuberculosis), and to aid the many others, minus any such dominant genius, to find a way out from the world of beds, ceilings, and deadly monotony through the avenue of books to innumerable side roads of varied interests.

Many have discovered hidden resourcefulness and genius during the long days of "chasing the cure" that might have lain dormant for years, or more probably have never been discovered, were it not for this opportunity for self-advancement and culture.

Many Hobbies Are Represented

In a hospital of such size as United States Veterans' Hospital No. 55, Fort Bayard, N. M., with over 1,000 patients of all types, the interest and scope is wide and one finds many hobbies, either advanced or developing. Here, the librarian finds one man who starts out with the modest request to read books of "some of the old fellows who have some style and who really could write," and who later requesting such things as Butler's Way of All Flesh, Swift's Tale of a Tub and Battle of Books, Carlyle's Sartor Resartus; from that he may branch off to poetry—"just lots of it please"—and read all the best we have, Shakespeare, Keats, Dryden, Scott, Kipling, along with critical studies of English composition, poetic construction and short story writing, to help him in his literary attempts.

Across the ward is a Greek who asks for a Greek newspaper. This we procured for him gratis through the courtesy of a Greek publishing company. Along with this, the librarian seized the opportunity for some Americanization work, suggesting that he begin the use of "English for Foreigners," but found that he had already advanced quite far in the study of the language. She then stimulated his interest in reading English books by indirect methods, beginning with "What the Greeks Have Done for Civilization." With many interesting discussions following his reading this, he began a course of reading in United States history, and the World War, to help him understand his adopted country more thor-

U. S. Veterans' Hospital No. 55, at Fort Bayard, N. M., has a separate library building where ambulatory patients and personnel may come for reading.

[1]Journal of Outdoor Life, editorial, May, 1921.

Scenes of library service on the wards and in the reading room of the library building at the veterans' hospital at Fort Bayard.

oughly. (He had fought overseas with our army.)

Then follows the contrast of the man who said he wanted only Western stories so that he might have a background (his pun) for starting his life out here as soon as he leaves the hospital. (Incidentally he is too far advanced ever to leave the hospital for this object, but he keeps up his courage in this way.) He reads all that we can find.

Then again is the man who starting with Mark Twain wants all the humorous stories, poetry, and essays; there are many such requests. As one man expresses it, "I want something funny, a thriller or an out-of-door breezy story—something easy to swallow until I feel better." This is where the detective, the humorous or western story is distinctly the thing.

Another man is interested in all the various expeditions. This involves our sending away to the various museums and institutions conducting these enterprises for contemporary information.

Next we come upon the man who requests "lots on forestry" as he intends to make this his vocation after he "escapes from 'Uncle Sam's Sanatorium.'" After exhausting our limited supply, we have had to call on the university, state and city libraries in the vicinity who have generously helped us out in all such emergencies with "short loans" of material that we with our limited funds could not afford to buy.

Repeatedly comes the request for chess manuals and game manuals of various kinds to help "beat the other fellow." Again, the baseball fans, in heated arguments, ask for sporting news. In this we are helped out by the generosity of the president of the American League for Professional Baseball, the editor of *Sporting News* and his wife, in receiving numbers of copies of the paper and the annual *Record Book*.

Owing to the great popularity of such illustrated material as the *New York Times Mid-Week Pictorial* and *National Geographic* we are again helped by the editorial staff and the influence of friends. These are used for the man whose eyes are troubled by the disease, and are the source of much discussion and interest.

Then we find the ex-minister who wants to put in his time in reading more on comparative religions, philosophy and psychology; the former probationer officer who asks for all that we can get on child labor news in the United States; the nature enthusiast who reads all of Burroughs, Sharpe and Maeterlinck; the former dentist, forced to prepare himself for another vocation, now studying up on mining engineering; the overseas nurse, in spite of having contracted the disease in foreign service, wanting descriptions of France and accounts of the World War.

Truly we find with Cowper that "books are not seldom talismans and spells," and that they help as nothing else can to show the patient—who may spend months and even years in bed—a very definite "way out." They can help as nothing else can to swing the pendulum from the tendency to constant consideration of the physical condition of life to the much more important condition, the mental attitude. A refreshed mind can much more successfully meet repeated pain or hemorrhage than one already worn with the dread of the next attack. Hence the distinct therapeutic value of the lightest fiction, plus the curative power of other more worth while things.

Library Building at Fort Bayard

Parallel with the ward service, which is considered the most important phase of the library service in a hospital, the ambulatory patients and personnel are served at Fort Bayard from an attractive building assigned to this use by the commanding surgeon, who has exhibited more than the usual appreciation of the value of this work to hospital morale. At this center, the convalescent patients come for books and for reading after rest hours, as the library building is open daily from 8.30 a. m. to 9 p. m. Many come in almost daily to consult magazines, newspapers, maps, reference books, or to read comfortably, and the quiet restful atmosphere serves as a diversion from the ward or barracks.

The library building also serves as a reference room collaborating with the craft work of the reconstruction

department and the educational and vocational work of the Veterans' Bureau. In many cases, books are loaned to these departments for reference while the instruction is being pursued.

In a situation such as ours, so isolated from the diversions of a town and with such a large personnel, the hospital librarian assumes the additional responsibility of providing diversion and help for many others besides the patients. Doctors, nurses, aides, teachers, clerks, orderlies, laborers of the various types come not only for diversion, but often for information which will help them in their vocations.

Doctors ask assistance in procuring books from nearby universities and libraries on subjects they are preparing for discussions or papers. Nurses, in a similar manner, use the resources of the library and ask for more. As one appreciative nurse remarked, "It is relaxing to come in and get your assistance to find the right book to cure a wrong mood. You have helped me to find treasures that would have gone unknown otherwise, since I am too busy to search for them." The clerical department asks for books on office management; the utilities department for books on sewage disposal, building construction and electricity, and the farmer for the raising of cattle and poultry.

Thus with a circulation fluctuating from about 2,000 to 2,500 per month our limited collection is strained to the utmost. It is interesting to note, however, that although fiction has the largest use—as is always true in this work—our non-fiction use averages one-third of the total circulation, an unusually large percentage for this type of service.

The success of this work has depended very largely on the unusual spirit of understanding, appreciation, and help that has been shown by the commanding surgeon and his associates, both doctors and nurses. Without this intelligent help our efforts would often fall flat.

And so, looking backward over the work, with its successes and failures, one cannot help but believe that for many the attitude has become, and will become, the philosophy of Shakespeare who says:

> "Sweet are the uses of adversity,
> Which like the toad, ugly and venomous,
> Wears yet a precious jewel in his head."

It was because of the keen and far-sighted perception of such men as Surgeon General Cummings, in appreciating the value of this work in the government hospitals, that when the American Library Association could no longer function under its War Service Committee, due to lack of funds, the work was taken over as part of the regular government service under the United States Public Health Service in July, 1921, just as the Army and Navy took over its library service the year previous.

DISCHARGED PATIENTS BECOME PROPHYLACTIC AGENTS

The discharged sanatorium patient becomes the greatest prophylactic agent for the prevention of tuberculosis that any community can have, says Dr. Robert J. Wilson, director of the Bureau of Hospitals of the New York City department of health, in an article on "Tuberculosis Patients as Health Educators" which appears in the current issue of *The Nation's Health*.

For more than ten years Dr. Wilson has been in charge of the tuberculosis institutions of the department of health in New York City and has had supervision over the wards for the care of the tuberculous at Riverside and Kingston Avenue Hospitals and at the Municipal Sanatorium at Otisville.

"In the strictest sense of the term," says Dr. Wilson, "each of these institutions has been a teaching institution, whose primary reason for existence has been the care of the tuberculous, but whose secondary reason for existence has been to teach those who are treated there how to go out and become teachers of others, both by example and by conversation on about how they were treated and what they had to do."

At Riverside Hospital they have had as high as 300 forcibly removed individuals at one time, representing for the most part the lowest type of outcast life in New York, and they have had instruction drilled into them until like soldiers they have become automatons. A large number of these patients later intelligently grasp the good that they are to do; the rest are held by fear of incarceration to observe the regulations laid down for them.

At the sanatorium at Otisville through which thousands of patients have passed, the principal thing taught to patients, beyond a proper regulation of personal hygiene and diet, is that they are to go out of the hospital and conduct themselves in the community so that none with whom they associate has any possible chance to contract the disease.

SACRIFICES ONE-THIRD OF MILLION FOR CHILDREN'S HOSPITAL

Miss Martha Wilson of Chicago not only sacrificed one-third of a million dollars from the estate of her father, John P. Wilson, but worked strenuously for four months so that the sacrifice could be consummated and the money could go to the Children's Memorial Hospital in that city.

Miss Wilson is chairman of the woman's auxiliary board of the hospital. Her father died last October, leaving his estate of several millions to be divided between Miss Wilson, a son, John P. Wilson, Jr., and another daughter who lives in California. One provision in the will, however, allotted one-third of a million dollars to the Children's Memorial Hospital provided enough to make a million should be contributed from other sources within a year. In case of failure to raise the money, the heirs were to receive the third of a million.

Miss Wilson, through her pastor, as chairman of the woman's auxiliary, realized just how much the hospital needed the money, according to a statement made by Mrs. Fred Upham, a director of the hospital, and immediately set out to raise the two-thirds of a million so the hospital would get the one-third from her father's estate.

For four months she gave the board of directors all the aid she could, even to soliciting contributions personally. The board has recently announced that the required two-thirds of a million had been raised; thus it is enabled to collect the third which Mr. Wilson left.

AN AIRPLANE AMBULANCE RECORD

Galloping hoofs no longer herald the ambulance bound on its errand of mercy. The modern Mercury may arrive even without the clanging of bells, amid the b-r-rrr of an airplane engine.

Airplane ambulances have been used by the U. S. army since early in 1918, but it remained for the French army in the Levant to report the evacuation of forty-four wounded by airplane over the 400 kilometers of Syrian desert between Deir-ez-Zor and Aleppo, a journey of twenty days by camel convoy and of at least a week by motor ambulance through hostile desert tribes. The airplanes left Aleppo with emergency aid and were back at the hospital within a few hours.—*The Survey.*

MAKING THE HOSPITAL SAFE FROM FIRE

By F. W. FITZPATRICK, Consulting Architect, Chicago.

UP TO the present the American people have been criminally wasteful in much they have done. As a nation our lands and forests have been lavishly misused and squandered, our mines have been recklessly worked, our great natural resources have been drawn upon as if they were inexhaustible, and only today are we beginning to awaken to the necessity of husbanding them for the morrow. So with our buildings. We have been stupidly trifling with them, spending great sums in lavish decoration, in beautiful embellishment of loose-jointed flimsy, weak, evanescent skeletons, and the result is that our annual ash heap has assumed stupendous dimensions.

Building in a slovenly, pinch-penny and non-fire-resisting manner is never pardonable. One can try to excuse it in some buildings where only real property can be in jeopardy, where human life is but remotely, indirectly at stake. But in a hospital, of all buildings, where a fire means loss of life, nothing must be left undone to make that structure positively fire-resisting.

Two Hospitals Burn a Week

For years the writer has kept tab on this matter of fire and here's the average weekly list of serious fires in the United States. Mark you, not little overturned lamp affairs put out with a pail of water, but fires doing at least 15 per cent of cost damage. Of that list an average of 18 per cent is total loss, utter destruction of the buildings. In a week's time our list shows two hospitals, two asylums, two colleges, three public halls, two jails, three theaters, twelve churches, ten schools, twenty-six hotels, six apartment houses, three department stores, 140 flats and 1,500 houses. Incidentally, too, in the past twenty-five years we have burned up thirty-four state capitals, 723 court houses, 1,960 city halls, 163 libraries and 1,424 banks. So you will notice that public buildings are no exception and hold their own in the race for extinction with private buildings.

Note that two hospitals, two asylums, two colleges, two theaters, two jails and ten schools are our weekly average. Think of the lives imperiled there!

The cure is simple. Build better buildings. "The insurance companies do not demand it," say you; "the reduction in premiums doesn't warrant it." As time goes on those who construct fireproof buildings will prove themselves masters of the situation and they will be the only people who will have satisfactorily solved the problem with profit to themselves. Insurance companies are not in business for their health alone. While many look upon them as more or less charitable in their activities, it can be safely predicted that when there ceases to be a profit in the process underwriting will cease. As centers of population become more densely settled, in spite of the expensively maintained fire departments, fire losses increase; the burden of fire taxation is proportionately augmented and must be carried by the gambler who risks everything and by the "conservative" man who only builds as well as the insurance companies insist he shall, share and share alike. The man alone who has emancipated himself from the thralldom of customs and precedents and has built a fireproof building can snap his fingers at insurance. "Fireproof construction does not burn and fire protected construction cannot be destroyed," nor need it be heavily insured.

No class of building calls for better construction than does the hospital. If anything can be perfect that indeed should be. No great expense is involved in making a hospital safe, but a vast fund of good common sense should be drawn upon.

Why, in these days of rapid and easy travel, should anyone want unnecessarily to plant a hospital in a crowded, busy section, down near railway tracks, freight yards, intersection of street car lines, across from a play ground, ball park, boiler factory or slaughter house. The noisiest place in town seems often to be the most desired spot for a hospital. And not always is it cheap property, but almost always the most ill-chosen. The hospital of all buildings, in the writer's opinion, should be quiet and in the least congested part of town. Emergency stations, public clinics and such places could, if desired, be stuck right down in the heart of the hubbub and rush of business, but not the hospital.

The hospital should be as nearly perfectly fire-resisting as it can be made. Structures should be entirely of concrete, brick and protected steel; floors of waterproof resilient, noiseless cement-composition, not absorbent wood nor noisy marble; walls and ceilings of hard plaster painted not the usual ghastly white but dainty tints, cheerful creams, buffs, pale greens and such.

If there be external exposure, there should be wired glass and steel framed windows; steel or asbestos-coated wood costs but a trifle more. Stories should be absolutely cut off one from the other by enclosed stairs (always absolutely fireproof) and elevators; and corridors should be cut up at frequent intervals with fireproof self-closing doors, so that fire in the contents of a room can be restricted to that unit. There also should be hose, frequently tested hose, buckets filled with water, fire-extinguishing apparatus of all kinds, and the nurses should be trained in the handling of all of them as an essential part of their nursing. A perfect fire alarm system is essential, not the clanging of bells that will drive patients into a panic but a system of lights in halls where nurses and employes only get the reaction, such as the dimming of all corridor lights quickly followed by intense green lights.

They are planning a hospital in the north of France with a ramp or incline outside from each of its three stories, a wide enough runway so that two lines of beds may be processioned down its gentle decline to safety. Under each hospital bed is sufficient covering so that, however cold it may be, the patient can be protected until removed to a place of safety.

"Labelling" Is Effective Remedy

The whole fire situation could be controlled by the insurance men. They have given a hand to fire prevention. Years ago they pooh-poohed it, but now they have experts, engineers, bureaus, all at work bettering conditions. They should take another step toward a more drastic inspection of buildings, particularly the public and semi-public ones, hospitals, theaters, hotels, offices and factories. A fire door found blocked open, old hose dried out and useless, rusted stand pipes, sprinklers and such equipment, should subject a building to increased rates, a species of fine; a second offense or failure to do as notified, cancellation of insurance. This might mean a bit heavier premium to pay for inspection, but after a time all pre-

miums could be lowered; even repairs or replacement needed in fire equipment could be done by the insurance companies and charged to the owners of buildings.

It may take time to secure such requisite legislation or authority, for the owners of cheap buildings will object, but the cities, urged by the insurance field can do something else most effective, the "labelling" of buildings. The idea is to classify them and label them conspicuously at their main entrance, "Fire Resisting," "Ordinary," or "Dangerous." Note the alacrity with which the man with "Dangerous" over his door will revamp and better his building so as to merit a higher classification, or else he will tear it down altogether and build decently. How many of us would take our sick ones through a hospital portal over which hung the official label "Dangerous"?

Insurance on Fire Traps Should Be High

Then we can urge legislation that will amend our system of taxation. Now, the more a man spends on his building, the better he builds it, the safer it is, requiring the minimum of city protection, fire departments, water pressure and all that, why the greater his taxes! Change that so that the fellow with the old, inflammable tinder-box of a building—requiring the maximum of city protection and constituting the greatest danger to all surrounding property—will pay the higher rate of taxation.

These are the things that will bring people to time, penalization touching their pocket books. These are not heroic or revolutionary methods and yet, wherever applied, they would work marvels in the way of bettering conditions. There is too much apathy in this matter, and the many authorities who know what it really means are fearful of applying the restrictions that are needed because, forsooth, some of these might too nearly touch powerful constituents or friends. We may only hope to attain the desired ends by forcing these authorities to do what is right via the pressure of public opinion. It is strange how those things run, but interesting to find that in all reforms the masses have to be compelled to do certain things by authority, and the authorities have in turn to be compelled to apply these compulsory measures by the weight of public opinion, public opinion in turn is molded, created by printers' ink and no cause deserves better at the hands of the press than does this one of fire prevention.

HOSPITAL MAY AID IN FIGHT AGAINST SYPHILIS

The hospital can be the base of operation in the great offensive against syphilis, if it will aid in the publicity, stimulate interest in the early diagnosis and treatment of the disease, help politically to enact beneficial laws and provide beds for the patient in the early stage, says Dr. Irwin C. Sutton in an article on "The Hospital's Part in the Fight against Syphilis" which appears in a recent issue of the *Pacific Coast Journal of Nursing*.

By aiding in the early diagnosis of syphilis, Dr. Sutton declares, the hospital will confer great aid upon its supporting community. Practically every town of 10,000 has a good general hospital with a working laboratory. This laboratory should be equipped with a dark-field apparatus and the paraphernalia for the performance of a reliable Wassermann test. The technician in charge should be reasonably expert in spinal puncture and in the technique of intravenous medication.

When it is realized that a patient with florid and extremely contagious syphilis can within a few hours after the administration of arsphenamin be rendered comparatively inocuous, more beds will be opened to the early case. By such cooperation on the part of the hospital, not only will the period of contagion be shortened, but that golden therapeutic aim of absolute cure will be more frequently accomplished.

A hospital is not giving its fullest service to the public unless it combines with the effort to cure disease a corresponding effort to prevent it and inhibit its recurrence. This result will only be attained through the development of a strong social service department; especially is this true of syphilis where the presenting patient may represent as many as ten undiscovered syphilitics.

HEALTH COUNCIL ISSUES LIST OF HEALTH FILMS

The National Health Council has prepared and published a comprehensive list of educational motion pictures on health subjects. Over 300 titles are included in the list which gives in addition to the title the number of reels or the length; the name of the distributor, the rental or sale price, or both; and a brief note about the subject matter of the film. The titles are classified under child hygiene, personal hygiene, public hygiene, communicable diseases, other diseases, nursing, anatomy, and physiology, etc., and miscellaneous. The film list will be sent to any person or institution interested in motion pictures on health subjects, but it is intended especially for public health workers, connected with official and voluntary agencies. A charge of 35 cents per copy is made for the list in order to cover part of preparing it.

In addition to the collection of information concerning health films the National Health Council, through the health films committee, is making a study of existing films and is encouraging in numerous ways the production of better health films. The health films committee has already reviewed and analyzed six motion pictures on health subjects and has offered to the producers of these films suggestions as to how the films might be improved. Numerous other films are scheduled for study by specially selected subcommittees.

In general it is the purpose of the committee on health films of the National Health Council to encourage the wider use of the best health films and to stimulate the production of better motion pictures on health subjects.

A CREED OF SERVICE

To respect my country, my profession and myself. To be honest and fair with my fellowmen, as I expect them to be honest and square with me. To be a loyal citizen of the United States of America. To speak of it with praise, and act always as a trustworthy custodian of its good name.

To base my expectations of reward on a solid foundation of service rendered. To be willing to pay the price of success in honest effort. To look upon my work as an opportunity to be seized with joy and made the most of, and not as a painful drudgery to be reluctantly endured.

To remember that success lies within myself—my own brains, my own ambition, my own courage and determination. To expect difficulties and to force my way through them.

To study my business. To know my profession in every detail. To mix brains with effort, and use system and method in my work. To find time to do every needful thing by never letting time find me doing nothing.

Finally, to take a good grip on the real joys of life. To play the game like a man. To fight against nothing so hard as my own weaknesses.

So may I be courteous to men, faithful to friends, true to God, a fragrance in the path I tread.—*Medical World.*

THE INFORMATION DESK

No satisfactory solution to a problem in your hospital is too trivial to pass on to other workers in the field. No question that perplexes you is too small to bring to the attention of those with greater experience in the field. This department is the readers' exchange, and its usefulness is dependent upon the measure in which its readers share their problems and their discoveries.

FOLLOW-UP FOR PRIVATE CASES

Touro Infirmary in New Orleans on March 1 began a new system of medical follow-up for private cases, over the possibilities of which the medical staff is enthusiastic.

The hospital has employed a follow-up secretary, who in following up cases will make an appointment for the doctor either in his office or at the hospital, or who will obtain the information by means of a questionnaire containing leading questions, answers to which will give an adequate picture for statistical posting.

Follow-up files will be developed in three sections. The first section will contain a tabulation of the symptoms present in each case from information gleaned from the history on discharge. The second set of cards will carry something of the same information gathered from subsequent follow-up reports. The first set of cards will be filed by disease nomenclature and the second set by name with appropriate cross reference. The third set of cards will be filed by the patient and the hospital hopes to obtain on these cards a graphic chart of individual efficiency. This will be either on a physical or an economic basis.

It is believed that the system will mean a greater potentiality of service to the patient as need for that service arises. The hospital will have tabulated information available from which it can readily say, for instance, that in a certain number of cancers of the rectum treated in this institution, so many had the symptom of bleeding, pain, etc. Over a period of years the follow-up system will enable the institution to analyze definitely the effectiveness of the various procedures, looking toward cures or reliefs. Another great advantage, not definitely a part of the system but which will develop from it, is that of having a trained medical secretary in the hospital who will be able to give general skeletal information and bibliography that will form the basis of professional papers.

MAGAZINES FOR STUDENT NURSES

To divert a part of the student nurses' attention from the lighter popular magazines toward professional journals by the establishment of a magazine rack of selected medical, nursing and hospital journals is urged by Dr. Herman A. Felder of Providence Hospital, Everett, Wash., in a recent issue of *Hospital Progress*.

As it now stands, says Dr. Felder, a nurse is far too well supplied with the fiction and photoplay magazines and rarely is offered a professional and scientific journal. The nurse, he feels, should be encouraged to read professional journals for pleasure, and for instruction. More use could well be made of them in the classroom by assigning given articles for reading by the entire class or articles be read and reviewed in class by individual students.

The magazines should be kept in racks, much as a public libraries, in the nurses' reading room, classroom or library. A nurse could be detailed to keep the books in order and to remove old issues. The writer makes a special point of having the latest and freshest issue on top. His suggested list of publications contain three medical, three nursing and three hospital journals. Six or seven of these can be obtained for $25 a year and the suggestion is made that the hospital staff might wish to furnish annual subscriptions to these journals as an expression of its good will toward the nurses, or that the nurses' alumnae organizations might be interested in helping fill the magazine rack.

HOSPITAL CHAIRS

Much contention is avoided at the Chicago Lying-in Hospital by having chairs all over the house of exactly the same pattern, says Miss Jessie F. Christie, the superintendent. This applies to dining room, office, nurses' quarters and patients' rooms.

For patients' use when they are able to be up, the hospital uses modified Morris chairs with small plain footstools. This makes a splendid nursing chair and is said to be much more comfortable than a rocker. For the Morris chairs, removable slip covers are used, and these covers are changed at least every two weeks. The furniture all through the hospital is finished in dark brown mahogany and this gives the building a refined and homelike appearance. The beds are steel, finished in dark brown mahogany. They have been in use nearly three and one-half years and do not show the slightest sign of wear.

REMEDIES FOR CLINKERING

The fireman in the small hospital power plant is usually a man without technical education, and the superintendent often may point out to him helpful facts on fuel economy. The following remedies for avoiding clinker troubles, which often give great annoyance to unskilled firemen, have been recommended by the U. S. Bureau of Mines:

1. Use thin fires and keep the fuel bed level by placing the fresh coal on the thin spots. Avoid leveling the

fuel bed with the rake. Above all, do not disturb the fuel bed with a slice bar.

2. Fire coal in small charges, thus reducing greatly the formation of a crust on the surface of the fires, and the need of breaking this crust. Be especially careful to use small charges if the coal contains much slack.

3. Avoid burning coal in the ash pit. If the ash pit is water-tight, keep water in it; if it is not, then blow steam under the grate. The steam can be taken from the exhaust of a feed pump or from any other supply of waste steam. In passing through the ash on the grate and through the fuel bed, the steam is super-heated and then partly decomposed into oxygen and hydrogen. The heating and the decomposition of the steam absorb heat. It is thought that this absorption of heat keeps the temperature of the ash below the melting pot so that clinker does not form.

4. Keep the ash-pit door open. To regulate the draft use the damper in the breeching.

If all the above rules are observed, under ordinary circumstances and with coal of average quality, there will be no trouble from clinker. In case, clinkering continues, relief can be had by spreading a few shovelfuls of crushed limestone over the grate when starting from a banked fire and after cleaning. The limestone should be broken to the size of a walnut.

PHONE CHARGES MADE CLEAR

Michael Reese Hospital, Chicago, solved a perplexing problem when it devised a little celluloid dial to be screwed on the mouthpiece of the telephone.

The hospital, says Mr. L. C. Austin, assistant superintendent, always had trouble with patients over their telephone bills. There seemed to be no understanding between patient and hospital as to the price of the call,

TELEPHONE SERVICE
CALLS 10c
ON RECEIVING "BUSY" SIGNAL OR WRONG NUMBER, NOTIFY OPERATOR AT ONCE, OTHERWISE CALL WILL BE CHARGED
OPERATOR WILL LONG DISTANCE
ARRANGE FOR ALL CALLS
NOTIFY THE INFORMATION DESK WHEN YOU HAVE ORDERED A TAXI SO THAT WE MAY CALL YOU ON ITS ARRIVAL
MICHAEL REESE HOSPITAL

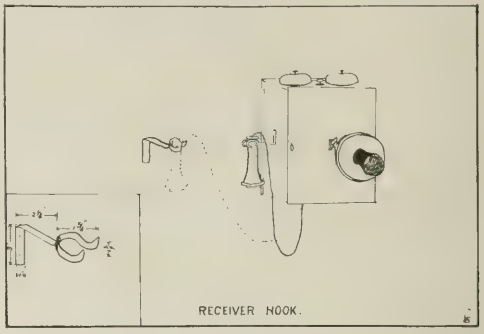
charges made for incomplete calls, the placing of long distance calls, etc. To get this information to the patient seemed easy, and to that end cards were printed and posted in each room. This plan proved a failure for the patient frequently claimed he had not seen the card.

Then the hospital hit upon the idea of posting the regulations on the mouthpiece, and the difficulty has vanished.

The sheer force of will power which has helped to establish your past records and the grim determination to move steadily on and fight and hope will enable you to overcome any temporary condition which may overtake you.

NO MORE BROKEN RECEIVERS

Telephone receivers are no longer broken nor are the walls about the telephones marred by bumping receivers at Michael Reese Hospital, Chicago, since the device pictured in the accompanying diagram has been put in use.



When a call for intern or nurse was put on a wall telephone, the person who answered was apt to let the receiver dangle while he went in search of the individual wanted. Many times the receiver would be broken and the wall was always marred by the impact.

The hospital found a satisfactory solution to this difficulty when it devised a hook, which when fastened to the wall, would hold the receiver until the person summoned reached the telephone.

SOCIAL AND SCIENTIFIC EVENINGS

A practice too little followed in American hospitals consists in inviting the public into the hospital to get first-hand knowledge of the institution and its work. If the hospital is fortunate enough to possess an auditorium or large room where citizens may gather for popular illustrated lectures on hospital and health topics, such gatherings may prove a powerful factor in breaking down the fear of the hospitals which still exist in many minds, especially among the foreign-born, and in building up sentiment for the institution which will react most favorably when the hospital wishes to put on a campaign for funds. Such a custom, of course, is a big step in getting the hospital to function as a community health center.

Middlesex Hospital at St. Marylebone, London, has inaugurated a system of "social and scientific evenings" in which industrial workers and residents of the district become the invited guests of the institution. The guests have shown themselves intensely interested in the scientific side of hospital work, and to many of them it has proved no less than a revelation. A desire to extend practical help to the hospital has been the invariable sequel.

Hospital Day has done much in acquainting the general public with the hospital and awakening interest in it annually. An occasional popular lecture by some member of the hospital staff on the x-ray, for example, would increase this interest and would react to the benefit of both hospital and guest. The social side too might occasionally be emphasized with good results. Then when the hospital attempts to go to the public for funds, it will not meet complete ignorance of its work and needs.

"It would be a noble beginning of the new order of things to use hygiene as the handmaid of civilization."—Florence Nightingale.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
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THE SANCTITY OF CONTRACT*

THE immediate cause of this series of somewhat disconnected reflections is a conversation which took place some time ago between the director of a great city hospital school of nursing and the members of her advisory board, who had met to confer with her concerning the serious shortage of graduate nursing service in the wards of the hospital.

In the course of the conversation it appeared that in spite of unceasing efforts on her part to obtain nurses, the director was meeting with little success. Moreover, in response to questions asked by the committee, she replied that in some instances when nurses had promised to come they had not only failed to arrive, but had sent no word of explanation as to why they were failing to keep their contract. For those whose deep interest in nurses is primarily concerned with their claim to being members of a profession, this seemed very hard to understand, and very hard to bear. Such behavior seemed lacking in the most elementary conception of honor, let alone of ideals based on ethical standards.

Nursing Day Was too Arduous

Ever since that meeting I have thought the matter over in every possible way, to see if any explanation might be found, which would in any measure account for such an attitude toward an accepted obligation. I do not feel then, nor do I feel now, that these nurses were necessarily called upon to throw themselves into the breach of that hospital's need. In the very nature of things the nursing day in that particular institution had become so hard that it actually constituted a physical overstrain for those who carried it.

The hospital was in a transition period. Medical procedures had multiplied much more rapidly than had the appropriations for nursing service. The number of nurses allowed was very little greater than when the nursing care of the sick had been definitely less complex. It was a position out of which the hospital would have to extricate itself by degrees; in a word, the hospital would have to make opinion for a different system before asking for an appropriation with which to apply it. In the meantime the nursing day was so difficult to carry that no doubt a very active feeling of resentment actuated such nurses as had carried it, especially as the difficulties of a city hospital are but little understood except by those immediately concerned with its management.

The solution, which a friend of nurses would most have admired at this juncture, would have been some kind of corporate action on the part of the nursing district of which, of course, the Central Registry was a part. This graduate nursing body might have come forward in a liberal manner to the aid of a city institution, if it had been approached as a body by the hospital's trustees. This, I am sure, was not attempted. However, if there had only been a strong concerted movement on the part of the graduates forming the nursing district, which would have caused it to act as a body, for the amelioration of conditions in these wards until such time as better things were possible, there might have resulted a plan whereby the service could have been accepted by a number of these graduates, following each other quickly enough to avoid physical overstrain. But here again it is necessary to reflect that the nurses in question were undoubtedly ignorant of the budgetary difficulties of the hospital, and no doubt felt that no day had to be harder than the willingness of individuals to stand it.

It is very difficult to take a liberal view of conditions when their pressure is directed upon one's self. But I know from experience that the capacity for self sacrifice and for participation in the furtherance of worthy causes is very great in graduate nursing bodies, and I still think that the district, if it had been appealed to as a body, would have shown generosity and resourcefulness, and that the action of the few of its members, who undoubtedly behaved in an entirely unprofessional manner, can be partially explained though not in any sense justified, by the feeling that just so long as people stand injustice, just that long will they be required to do so. However, not for one moment can such considerations exonerate an individual from failing to abide by a contract when made, or from making adequate excuse if this is found to be impossible.

And this is what made me decide to express myself openly, rather than carry within myself a sense of disappointment which might easily become at least partial disillusion. I wish I might know before going any further how many cases there had been at that time of failure to keep an engagement with this particular institution, the ages of the nurses involved, and the names of the schools by which they had been graduated. And I also should like to know whether or not there may have existed in the minds of these individuals a sense of detachment from a corporate entity, such as a hospital, different in character from that which they would have felt toward an individual patient. Because I have not these facts I should have preferred to wait a while before speaking openly of the incidents referred to, but perhaps it is well to open the matter for discussion now, hoping a more adequate explanation will be offered in response.

*By one who has proved herself a true friend of nurses.

Even as I write explanations of one kind and another offer themselves to my mind. For instance, may it not be possible that more and more there is creeping into the public consciousness the idea that hospitals, in the largest sense of the word, have not been fair to the student nurse and that occasionally she may be animated toward one of these institutions by feelings somewhat like those of the "dough boy" toward a superior who to him had seemed and possibly had been "hard boiled." None of these things excuse, of course, but what we are in quest of is explanation—the first step toward justification—even if a long, long way from that goal.

In spite of the constant improvement in hospital schools of nursing there still must linger in the minds of many graduates the feeling that they were asked to give as much as possible, and the hospital gave them as little as possible in return. Even though conditions on every side were bettered, this method of dealing with students was not calculated to arouse a loving fealty toward the alma mater, not certainly of a kind to cause her to drop all consideration of personal advantage and fly to her lovingly in an hour of need. That would be asking too much, and yet even so, the thought of a broken contract and a contract broken without excuse is intolerable, nothing alters that fact.

Nurses No Longer a Homogeneous Group

Perhaps it is no longer possible to consider nurses as a homogeneous group. Conditions have changed so rapidly, their numbers have increased so amazingly, and the standards of hospital schools and state requirements are so different that the differences between the individual members of this profession must be correspondingly great. Formerly in this country, nurses were largely recruited from homes where the missionary impulse was in the ascendant, and these pioneer nurses continued the still earlier tradition of nursing as a vocation. Many of these nurses were animated by a deep religious devotion to their work. Few occupations were open to women in that day and the flower of active and energetic womanhood found in nursing an opportunity for the realization of the highest ideals. These women set standards in nursing ethics and practice which it would be hardly fair, perhaps, to look for in all of the tens of thousands who have joined this profession during the last few decades. Indeed, many of their lofty traditions might seem almost quixotic when compared with the every-day life of the great mass of people outside of their calling. However, sanctity of contract is something that cannot be allowed to join the wreckage in the stream no matter how high the freshet. There are certain fundamental principles, the observance of which holds society together and without which it would ultimately be torn apart.

It is particularly hard for me to write anything of a critical nature concerning nurses for I honestly believe that I have never met in any group of people as great a capacity for self-advancement and the advancement of their fellow members as in this profession. Many and many a time have I compared a visiting nurse—and I speak of her only because her daily routine is more familiar to me than that of others—with her long day of usefulness in the neediest parts of town or rural district; her interest in her patients; her enthusiasm in her work; her constant sharing of her salary with members of her own family who may need it, helping a brother or sister to continue at school or get into college; keeping the sick in her own inner circle contented; and full of enterprise, ambition and pride in her own career, many a time I have compared such a one to many of the boys and girls home from college who seem to have but one idea in mind—a good time and unlimited self-indulgence.

You may say that possibly an economic difference between the contrasting examples I have in mind is sufficient to account for the industry of the one and the self-indulgence and lack of responsibility of the other. But such an idea can hardly be called sound. The one person to my way of thinking is an asset to the community in which she lives, and the other, temporarily at least, is quite unproductive if not a positive detriment. And here we may well ask ourselves whether or no the school of nursing which exacts from its students full payment, if not in money alone at least in service, doesn't build up a greater capacity for *doing*, than it is possible to develop in students in colleges and other institutions, where so much education is given outright through subsidy. The life that a person leads, shapes him as the potter's wheel shapes the vase, so that if one is useful, unselfish and energetic, one becomes steadily more beautiful in character than if one is idle, self-seeking, and self-indulgent. It is partly because nursing offers such a splendid opportunity to women to become great in soul and spirit that one feels like weeping bitter tears when nurses fall away from commonly accepted traditions of honor and probity.

Hospital Itself Often Materialistic

But one has not far to seek for excuses for them. Undoubtedly there is a spirit of materialism abroad which invades all our institutions. Let us imagine for instance the case of a young, inexperienced girl with the insufficient background of education which some hospital schools tolerate, and let us imagine also that her home training has not held up before her the ideals of religious or ethical behavior. What chance has she to be built up along these lines in the majority of our hospital schools of nursing? Her study of ethics no doubt will be largely confined to the narrow specialty of the ethics of nursing, rules of behavior in many instances, not great principles of conduct which would guide her in the perplexing currents of life. And the materialism of the hospital itself with its emphatic recognition of the successful surgeon or physician who keeps its paying wards in full swing, the gossip that the young girl hears on every side of "this man" who gets so many thousands of dollars for such and such an operation, the luxury of the hospital's private wards and the conspicuous attention given to the very rich. In fine, the charm and excitement which the power of wealth brings to the doors of these institutions and the manifest effect which these things have upon the physicians, superintendent and nursing staff are not calculated to produce an attitude of idealism and unworldliness on the part of the student nurse.

I am sure I am not exaggerating when I say that throughout a very large number of our American institutions there is a conspicuous accent laid upon the comfort and well-being of the very rich when they come into the hospital for care. One of the best nurses I have ever known said to me once, "There should be no such thing recognized in medicine or nursing as rich patients and poor patients. There should only be very ill people needing great attention, less ill needing less attention, and so on." Theoretically speaking, this statement ought to be a truism, but from a practical standpoint we all know that it works out in a very different way. Not but that the poor in the free wards of our American hospitals receive all that science and skill can give them, and perhaps profit even more greatly than the rich because it is easier to enforce discipline in their treatment, but one must also admit that the *overattention* given to a rich

patient must have a very decided effect in forming the attitude of the student nurse. If she learns anything under this system thoroughly it will be to look out *sharply* for herself and above all things to be successful and get ahead.

Now in my mind all this leads straight to one conclusion, and that is, that there is very grave danger for nurses in ceasing to think of nursing as a vocation as well as a profession. The dangers which beset them on every side are too great for them to pass through unscathed, unless they cling to the precious inheritance which has come to them through the long centuries.

Student Must Be Taught Sympathy

However, we on our side must be reasonable also. The student nurse today is younger than the candidate who presented herself years ago. There is less hypocrisy as well as less religion in her upbringing. In many instances she comes fresh from our public schools bringing with her the slang, the oddities of dress and manner which form a part of the very atmosphere of the young of this period. Her contact with the sick in the wards undoubtedly does accustom her to the sight of pain and human distress, and if she does not receive compensating instruction as to the sympathy and consideration she should show to these unfortunate ones and to their families, the very excess of her youthful spirit and energy will make her seem both callous and inconsiderate.

She must be taught to cultivate the gift of imagination, to put herself temporarily in the sick one's place, and to realize that he and the persons forming his little world are by reason of their misfortune, living in a world apart where the give and take of ordinary life may seem unfriendly and cruel. Of course she cannot carry this too far or she will unfit herself for the successful performance of her daily tasks, but she can exemplify that admirable definition which Emerson gives of a gentlemen—he who makes the fewest people uncomfortable. That she can do, if she listens to the promptings of her own heart and does not still its voice. But that is precisely what is often done. Because of the rushed and over-material life of every day, the "still small voice" is disregarded.

A nurse in her official capacity must always have somewhat of the vocational character which precludes as I have said, the over-vivacity, the slang, the popular fads in dress and manner, which in her unofficial life may quite properly be the right of her youth and temperament to exercise. But in the very nature of things her occupation leads her among the sick and sorrowful and she must key her instrument to their need. That is common sense as well as appropriate conduct.

We have instances in history to assure us that it takes only a very small leaven of that which is distinguished and fine to save a group of human beings associated together for the fulfillment of their ideals. And to my way of thinking no other professional group has a greater number of members, possessing a capacity for self-sacrifice and a keen sense of the immense power for good inherent in their art. Women of high character, sound education, great personal charm, are found everywhere among nurses. But, I repeat, one must also admit that during the last decade or two there have been conflicting influences at work and the excessively rapid multiplication of hospital schools and their determination to get a profitable student body at any cost has brought into nursing many members who are less representative of the best ideals of this profession.

The district associations of graduate nurses should work in season and out of season to increase their membership and to set in motion such activities as will remedy many of these inequalities. They have a tremendous opportunity to distribute the loaves and fishes so that all who come may be fed, and it has been my observation that by far the greater number of all nurses long for the better things which education and culture have to give and will make great sacrifices to obtain them. The graduate nursing bodies now formed into district associations, are to my way of thinking almost too prone to ask their members for money for the support of various altruistic projects. The nurse gives to these, out of all proportion to her salary. She should leave herself a large margin for rest and recreation, and her district should "get in" between her and the public and should not only defend her from criticism, but also insist that she comply with the highest and best of their corporate standards and principles. In an instance such as that which gave rise to this paper the district should act with the foresight and altruism which befits a corporate entity which all support and which consequently should represent the best which is in them as a group.

Perhaps I have seemed to wander far from my original theme, and therefore I must come back to it in closing and say that we must not forget to set first things first, and that in order to go unitedly forward we must keep faith with ourselves and with one another always.

IOWA GIVES COURSE FOR NURSE EXECUTIVES AND INSTRUCTORS

The University of Iowa will offer during its regular summer session a special six weeks' course for graduate nurses. It is especially designed for nurses occupying executive positions and for those engaged in teaching in schools of nursing. It will be given June 11 to July 20.

Miss Mary C. Wheeler, R. N., B. A., superintendent of the Illinois Training School, Cook County Hospital, Chicago, will be director of the course. Assisting Miss Wheeler will be Miss Beulah Crawford, R.N., M.A., educational director of the University of Iowa hospital school of nursing, and Miss Lola Lindsey, R.N., practical instructor of nurses at that institution.

Among the subjects to be offered will be administration in schools of nursing; teaching nursing principles and methods; organization of nursing subjects; and demonstrations of nursing procedures.

Miss Elizabeth Bemis, B.S., administrative dietitian at the University of Iowa Hospital, will give a course in institutional management. A course in psychology is one of the required subjects, while electives may be chosen from various departments of instruction in the university curriculum. Summer school faculty members in the various colleges and departments of the university will appear as special lectures on the staff.

ILLINOIS DISCUSSES INSTITUTE

The Illinois League of Nursing Education recently has sent out a questionnaire to various superintendents of nurses, nursing organizations and graduates to determine whether there is a demand for an institute for nurses in that state. If such an institute is held it will be conducted in Chicago for two weeks in either June or September. The tentative program consists of ten lectures each on psychology, principles of teaching and sociology, ten visits to institutions and various demonstrations. Miss Mary Cutler of Presbyterian Hospital, Chicago, is at the head of the project and inquiries regarding the institute should be addressed to her.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

LANE AND STANFORD UNIVERSITY HOSPITALS HAVE OUT-PATIENT DIET LABORATORY

By LOTTIE B. SLOAN, Chief Dietitian, Lane and Stanford University Hospitals, San Francisco, Cal.

IN THE organization of the dietetic department of a hospital, special or medical diets are usually the last thing to be considered.

In our hospital the improvement of the special dietetic service presented no exception to this rule. We had studied general diets and menus, food service both to patients and employes, food waste, kitchen and dining room equipment, teaching methods and facilities, but as for the special diet work, this was slow in development. While in the beginning it was extensive enough to warrant the employment of two dietitians, it was not important enough to require separate and adequate space or equipment.

This work was handled in the main diet kitchen of Lane Hospital until the completion of the new Stanford University Hospital. The increased room thus provided enabled the dietetic department to take possession of a small room about 11'x12' adjacent to the main diet kitchen, and segregate the special diet work.

A small sink with drain board, a three burner gas plate and portable oven, a cupboard and icebox, a tray rack and tables were installed. The further equipment consisted of two pairs of scales, the cooking utensils and a boy to wash dishes and deliver diets. Thus prepared the quantitative work started on an independent career.

The calculating of diets, cooking and weighing was done by two dietitians. In general the diets were weighed out, packed on small trays and delivered to the various service kitchens by the boy. Some were delivered directly to the patients.

Out-Patient Laboratory Develops

With the improved facilities, an increased interest developed on the part of the visiting staff of the hospital. This resulted in a large increase in the number of special diet patients and soon a demand arose on the part of out-patients to be served meals in the hospital. The only place these could be accommodated was in the kitchen itself and a considerable number of boarders showed themselves glad to put up with the inconvenience of eating in the very small kitchen for the sake of getting a quantitative diet ready prepared and served.

Besides the out-patients who came in as boarders so many requests came from patients about to leave the hospital to help them in the home preparation of their diets, that we began to feel it was time to consider enlarging this department and making out-patient work a branch of this department which might develop into a real community service.

The dining room of the special diet laboratory at which twenty-two out-patients and visitors may be served at a time.

Calculating diets in the kitchen of the special out-patient diet laboratory.

After canvassing various locations adjacent to the hospital the ground floor of a corner dwelling belonging to the university and situated opposite the hospital was decided upon. This provided a floor space of about 35'x90' with plenty of light. It was divided into a dining room, large kitchen and store room.

The dining room was neatly furnished with seven cream enameled tables seating twenty-two at one time. One corner of the room was divided off by a counter where baked goods and other prepared foods are sold and the cash register kept.

The kitchen is completely equipped and has ample room for the necessary calculating tables and for the giving of lectures and demonstrations to small classes of medical students and student nurses.

All supplies are brought over from the hospital store rooms and all the quantitative diets and adult formulas are delivered by tray wagons from this kitchen to the various hospital service kitchens where they are reheated and served.

This out-patient diet laboratory serves then the following purposes:—

1. To provide out-patients such as diabetics, nephritics and obese with a convenient place where special diets may be obtained.
2. To prepare all the special diets prescribed for the hospital patients. In this case the trays are delivered to the hospital service kitchens by a food carrier.
3. To prepare infant formulas in bottles as prescribed.
4. To prepare bread, broths and other invalid food to be sold over the counter.
5. To instruct medical students, nurses and student dietitians in the subject of diet.
6. To serve light refreshments to visitors at the hospital and to the public.

Main diet kitchen at Lane and Stanford University Hospitals.

One of the service kitchens to which the special diets for in-patients are delivered.

A tray wagon laden with special diets for hospital patients. These are delivered to the various hospital service kitchens where they are reheated before serving.

In addition to the above, arrangements are often made with patients to receive lessons in computing their own diets. A moderate charge is made for this instruction. For patients in their own homes who are unable to come to the diet kitchen, diets are calculated and weighed. These diets are put up in the same way as the hospital diets and usually some member of the family calls once a day and takes the three trays home where they are reheated and served.

In a few cases where patients have a nurse at home, the nurse has been unable to do the calculating but can manage the weighing. In these cases we calculate and make out the menu for the nurse.

In addition to the special diet work we serve a regular fifty cent luncheon. This luncheon is patronized largely by hospital officials, medical students and hospital visitors.

Bakery Goods for Sale

Another branch of the work is baking. We make for our own use and to sell bread substitutes for diabetic patients, such as bran-agar cakes, Hepco bran cakes, bread and muffins and cakes from various protein flours such as hepco, soybean, diaprotein, Listers, Allen and Hanbury's. We also keep these flours for sale and in addition agar agar, cocoa nibs, mineral oil, India gum and water packed fruits such as rhubarb, peaches, pears, apricots, plums and grapes.

We are now working up a considerable mail order business in baked goods for diabetics. We also supply a demand on the part of patients in hotels and from families who find it more convenient to purchase invalid delicacies than to make them. These comprise beef broth, cream soups, starch puddings, pureed vegetables, etc.

With the establishment of the special diet laboratory,

A class in dietetics at the Lane and Stanford University Hospitals.

we are particularly pleased to find ourselves equipped with ample space and facilities for teaching. Our plan of instruction in addition to the regular lectures on the subject of foods and diet calls for special exercises in the planning and preparation of all kinds of special diets. This year we will be able to give the medical students, student nurses and student dietitians actual work along these lines.

Routine for Students

The routine for the student nurse is now as follows: two weeks in the main diet kitchen under direct supervision of a dietitian; two weeks in private room service kitchens under direct supervision of a second dietitian; two weeks in full charge of one of five service kitchens under general supervision of third dietitian; two weeks as roust or relief where she circulates through various kitchens under partial supervision; and finally two weeks in special diet laboratory for metabolism work under direct supervision of a dietitian.

The routine for student dietitians is similar: one month in the main diet kitchen under direct supervision where experience and opportunities for observation are given in cooking in large quantities and in serving; (the work as carried on in the main kitchen and dining room is also under observation;) one month in service kitchens of the private and clinical departments; and one month under direct supervision in the metabolism work of the special diet laboratory.

The above routines represent the practical work. In addition regular lectures are given to all three sets of students and in the case of student nurses special instruction is given in individual cookery.

NEWS ITEMS

Miss Sarah Merritt is the new dietitian at the Long Island College Hospital, Brooklyn, N. Y. Miss Merritt recently finished a course in student dietitian training at Presbyterian Hospital, New York, and is a graduate of the home economics department of Cornell University.

Miss Rena Eckman gave up the work at the University of Michigan Hospital, Ann Arbor, to go to Michael Reese Hospital, Chicago. A laboratory for research at Michael Reese Hospital will make it possible for Miss Eckman to carry on the work she has been interested in for some time.

Miss Octavia Hall, recently at Peter Bent Brigham Hospital, has given up the profession of dietitian to be married. However, her interest in the American Dietetic Association is in no wise decreased, she declares. Miss Amalia Lautz, formerly of Presbyterian Hospital, New York, succeeds Miss Hall at Peter Bent Brigham.

Miss Rosina Vance, assistant dietitian at Mount Sinai, New York, is undergoing a siege of scarlet-fever. Miss Mame Porter is substituting at Mount Sinai during Miss Vance's illness.

More than thirty reservations were made for the annual dinner of the Chicago Dietetic Association which was held at the Cordon Club on January 24. After a delicious dinner, the president, Miss Anna Boller, made a short report of the year's work and sketched a few plans for 1923. Dr. George L. Scherger gave an informal talk on "Mummies and How to Revive Them." This did not prove to be as "dead" a subject as the title suggests. In his humorous way, Dr. Scherger drew the dietitians away from all thought of their profession and tried to stimulate in them the love of literature, music, travel and those finer things which change existence to life.

Miss Lucile Hartman has gone to Presbyterian Hospital, Chicago, as assistant dietitian instead of to the hospital of the same name in New York, as was erroneously stated in the March issue.

Miss Mary Moore, Ohio State University, has charge of the Children's Fresh Air Camp in Cleveland. Miss Moore recently finished training as student dietitian with Miss Ellen M. Gladwin at Jefferson Hospital, Philadelphia.

Miss Ethel Pipes has recently taken charge of the dietary department at Tacoma General Hospital. Miss Pipes was at Hartford Hospital, Hartford, Conn., for a number of years.

The Minnesota Dietetics Association held its January meeting at the Norwegian Deaconess Hospital, Minneapolis. There was a discussion and exchange of favorite recipes. Officers for the ensuing year were elected as follows: Margaret Drew, reelected chairman; Gertrude Thomas, University Hospital, Minneapolis, vice chairman; Grace Moreland, Phalen Park Sanitarium, St. Paul, secretary; Dorothea Olney, City & County Hospital, St. Paul, treasurer; and Florence J. Aalberg, Northwestern Hospital, Minneapolis, corresponding secretary.

The February meeting was held at St. Luke's Hospital, St. Paul. A very profitable talk on "Vitamines" was given by Dr. Cornelia Kennedy of the University Agricultural College, who has done considerable research in that field. The March meeting was held at the General Hospital, Minneapolis. Book reviews covering the latest work in nutrition were given by members of the Association. The April meeting will be held at Rochester.

A STUDY OF FOOD WASTE

From the Department of Dietetics and Housekeeping, University of Michigan Hospital, Ann Arbor, Mich.

The spectacle of food waste always challenges an explanation. The casual onlooker finds material for comment, the import of which is seldom charitable to the dietary department. The business administration views the matter with startled horror. The busybody sees with glee a new morsel to offer as he sits on the corner of his well-polished table and discusses the wicked extravagance of the cooks and the negligence of authorities in general. The dining room customer, if he thinks about an interpretation at all, finds credence only for the suggestion that food is so badly prepared that it is wasted rather than eaten. The departmental head is, however, honestly anxious to know if the waste is really excessive, if it is specific or general, if there is legitimate cause for it, and if a

study of the matter would have any bearing upon the methods of cooking or serving or upon economy.

With a view to answering these latter queries, a study of food waste was made by the department of dietetics and housekeeping of the University of Michigan Hospital. One year ago, in 1922, the first study of this kind was made by the administrative dietitian, Miss Eva S. Schairer, some of the results of which have already been published. Recently a second study was carried out by the present administrative dietitian, Miss Ruth E. Jenkins, the data of which appear below. The method of conducting the investigation may be of interest.

Before serving each meal all food was weighed or measured in the central kitchen. In all of the serving rooms the plate waste was collected in separate containers, returned to the kitchen and weighed. Milk, tea and coffee were measured. An attempt at accuracy was made by estimating the amount of waste milk in tea and coffee and also by draining the waste milk off from the uneaten cereal.

For many forms of refuse, paper bags were found to be a convenient receptacle. All ward waste with two exceptions was sent to the central kitchen to be weighed. Scales were placed in the contagious and dermatology wards and the nurses in those wards cooperated in carrying out the regime by weighing and reporting waste on suitable blanks provided for that purpose. By tabulating the study as given below a number of features of dietary food service may be studied.

When waste is excessive, explanation must be sought for under one or more of the following heads.

1. Too large plate servings.
2. Unpopularity of food.
3. Unpopular combinations of food.
4. Bad cooking of food.
5. Poor methods of handling food.
6. Too frequent serving of the same dish.
7. Individual likes and dislikes.
8. General unattractiveness of food.

Study of Food Service Waste—Feb. 1, 1923

Breakfast	Dining Room				Wards			
	Food Sent	Food Ret'd	Waste	% Waste	Food Sent	Food Ret'd	Waste	% Waste
Apple Butter					81 lb.	14 lb.	6 lb.	9.9
Grape fruit	157 lb.	21 lb.	73 lb.	53				
Hominy	50	4	9	10	128		30	29.6
Potatoes	36		15	45				
Prune	11	2	4	44				
Coffee cake	36	11	3	11				
Coffee	16 gal.	2 gal.	2 qt.	13	16.5 gal.		9 qt.	10.6
Milk	15 gal.	3 gal.	3	13	27.5 "	4 qt.	13 "	9.
Butter	15 lb.	2.5 "	1	8	10. lb.		1.5 lb.	15.
Dinner								
Roast Pork	70.25	5	17	26	40	4.5	7	19
Mashed Potatoes	140	13	11	8.6	136	8.	28	19
Spinach	95	5.5	15	17.	109	23.	21	24.4
Pineapple Ice cream	18 gal.	3. gal.	2 qt.	4.1	18 gal.		2 qt.	4.2
Butter	15 lb.	3	1.5	12.5	1.5 lb.		2	19.
Tea	13 gal.	6. gal.	14 qt.	50.	13 gal.		19.9 qt.	5.2
Milk	36 gal.	15 "	3 qt.	8.	27.5 "		18 "	16.3
Supper								
Cold Meat (Lyonnaise)	41 lb.	8	11	31.4	30	4.5	5	19.5
Potatoes	120	6	19	16.6				
Hashed White Potatoes					126	11.	34.5	30.
Plums	88	18	11	12.7	98		7.	
Fried Cakes	30		3	10.	94	7.	6	15.7
Butter	15	6	2.75	27.5	10		2.75	27.5
Tea					10 gal.		15 qt.	37.5
Coffee	10 gal.	4 gal.	9 qt.	1.2				
Milk	26 "	13 "	1 qt.	2.	113 qt.	4.5 qt.	11.75 qt.	14.5
BREAD FOR ENTIRE DAY	144.5	33.5	23	20.9	133	6.	26.	20.4

With this data at hand the adjustment of difficulties can next be studied and may involve factors that have been previously ignored because established routine has a way of sternly resisting innovations.

Study of Food Service Waste—Feb. 2, 1923

Breakfast	Dining Room				Wards			
	Food Sent	Food Ret'd	Waste	% Waste	Food Sent	Food Ret'd	Waste	Waste
Prunes	60	6	9	10	90	10	11	23
Oatmeal	60	6	9	10	132	6	17.5	13.8
Milk Scones	32	10	5.5	8				
Potatoes	46	6.5	14	31.				
Ham	28	2.5	6	21.				
Coffee	16 gal.	3 gal.	10 qt.	19.	64 qt.		13 qt.	30.5
Milk	32 "	15 "	1 "	6.	144 "		30.7	12.8
Butter	11	0.75	1	16.	11		1.5	13.6
Dinner								
Beef Steak	90	6	17	1	103.5	4.5	15	16
Potatoes	96	20	15	16.1	126	8.	29	26
Lima Beans	88	20	10	15.3	62	9.	17	31
Blanc Mange	100		6.5		110	22	35	
Fruit Sauce	60	15		4.9	40	3		21
Tea	14 gal.	3 gal.	2 qt	25	61 qt.		18.1	29.6
Milk	30 "	10 "	1 "		144 "	3qt.	28qt	24.2
Butter	15	2	2.5	19.	14		2.	19.
Supper								
Scalloped Corn	92	11	16	20	95	5	16	16
Eggs	48	7.5	17	41.	64	5	5	7.
Pineapple	88	27	5	9.4	80	4	10	12.1
Ginger Drops	38	13	2	8	89	2	8	11.
Tea					61 qt.		17 qt.	27.
Coffee	18 gal.	3 gal.	12 qt.	20				
Milk	30 "	14 "	1"	1.6	109 qt.		20 qt	19
Butter	16	4	2	4.6	10.5		2	19.
BREAD FOR ENTIRE DAY	147.5	39.5	25.5	24.	136.5	8	28	21

Study of Food Service Waste—Feb. 3, 1923

Breakfast	Dining Room				Wards			
	Food Sent	Food Ret'd	Waste	% Waste	Food Sent	Food Ret'd	Waste	Waste
Apples Baked	66	5	23	34.4	96	12	31	36.7
Cornflakes	10	4	1.5	25.	11		6.25	28.5
Bran Muffins	20	10	7.5	76				
Eggs	36	1.5	12	49.3				
Coffee	16 gal.	2 gal.	14 qt.	25.	64 qt.		19.7 qt	30.7
Milk	30 "	8 "	2 qt.	2.9	154 "	3qt.	18.1 "	12
Butter	15	3.5	1.	10.4	10.5		3.	28
Dinner								
Salmon	84	14	24	35.3	130	14	15	14.1
Cold Ham	9.5	1	4	44.				
Potatoes	136	15	31	25	111	7	29	28.1
String Beans	64	28	16	32.6	69	10	19	28.
Peach Pie	144		4	27				
Fruit Tapioca					76.5	8	18	26.8
Tea	13 gal.	6 gal.	12 qt.	42.1	61 qt.		17.7 qt	29
Milk	30 "	8 "	1 "	1.2%	111 "	3qt	16.9 "	15.6
Butter	15	3	2.5	20.5	10.5		2.	19.
Supper								
Baked Potatoes	150	18	[illegible]	40.6	86	8	30	36.1
Cottage Cheese	40	10	3	8	76	5	10	14.9
Pears	80	10	2	2.8	80	7	7	8.7
Drop Cakes	40	7	3	9.	30	2.	5	14.9
Tea					64 qt.		16.1 qt	25.2
Coffee	14 gal.	3 gal.	14 qt.	24.				
Milk	30 "	12 "	1 "	1.4	106 qt.	6qt	17.8 qt	17.1
Butter	15	5	1.5	15	10.5		2.	19.
BREAD FOR ENTIRE DAY	143	66.5	26.5	38.	147.5		37	26.8

Ounces Waste per Person per Day

	Dining Room				Wards			
February	-1-	-2-	-3-	Av.	-1-	-2-	-3-	Av.
Bread	.75	.88	.88	.84	.92	1.31	.96	1.06
Butter	.17	.12	.16	.15	.24	[illegible]	.17	.22
Milk	.19	.19	.20	.21	3.32	3.84	4.63	3.89
Cereal	.29	.20	.07	.21	1.38	.83	1.41	1.74
Meat	.56	.80	.56	[illegible]	.24	.64	.31	.38
Potatoes	.44	1.19	.44	[illegible]	1.44	1.06	1.06	1.00
Vegetable	.75	.76	.32	[illegible]	.37	.50	.59	.48
Desserts	.11	.11	.11	.10	.14	[illegible]	.96	.69
Fruits	.36	.16	.16	.19	.26	.14	.31	.28
Persons Served	407	407	407		414	414	414	

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

CLOTHES MAKE THE MAN

PERSONAL appearance, in hospital as well as in civil life, is one of the incentives to personal efficiency, and in fact can often be taken as a measure of personal efficiency.

Until recently only a few hospitals have required their employes to wear a distinctive garb. Now there is a marked tendency among progressive institutions to have the entire personnel appear in uniforms that have been selected to meet the individual requirements of the various groups.

The effect of this tendency is clearly shown in three directions:

(1) On the part of the institution, better discipline and higher morale are the natural results. A higher degree of cleanliness is readily secured when each employe is required to wear a uniform suitable to his duties.

(2) On the part of the individual, well-designed and suitable uniforms are powerful factors in influencing conduct. A clean, freshly laundered uniform is an incentive to neatness in every duty. The donning of a distinctive uniform when going on duty and its removal at close of the day's service have a very distinct influence on the mental attitude of the employe. Proper uniforms give employes a certain pride in their work and a desire to live up to those standards that may be rightfully expected of them.

(3) To the hospital patient or visitor, the general use of uniforms by the various classes of employes at once carries a suggestion of service efficiency. Confusion is overcome, employes are definitely separated from patients or visitors, and those in authority can be readily distinguished from subordinates.

Concrete examples of what two leading hospitals have accomplished in this direction are given. Mr. F. E. Chapman, director of Mount Sinai Hospital, Cleveland, has furnished the following uniform schedule which is followed in that institution:

MEDICAL DEPARTMENT

VISITING STAFF & LABORATORY CHIEF

No. personnel 26
Standard supply..... 50
Garments .....coat
Style .....¾ length, lay down collar
Material:
  Color .....white
  Kind .....duck
Paid for by.....hospital
Laundered by .....hospital

INTERNS & RESIDENTS

No. personnel 13
Standard supply..... —
Garments .....coat and trousers
Style .....coat, half length, military collar; trousers, regular
Material:
  Color .....white
  Kind .....duck
Paid for by.....wearer
Laundered by .....hospital

TECHNICIANS, LABORATORY & X-RAY

No. personnel 8
Standard supply..... 25
Garments .....standard operating gown
Style .....full length, high neck, long sleeves, tie back
Material:
  Color .....unbleached
  Kind .....sheeting
Paid for by.....hospital
Laundered by .....hospital

NURSING GROUP

PRINCIPAL

No. personnel 1
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform
Material:
  Color .....optional
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

SUPERVISORS & INSTRUCTORS

No. personnel 4
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform
Material:
  Color .....white
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

HEAD NURSES & ASSISTANTS

Personnel 15
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform
Material:
  Color .....white
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

GRADUATES, (Mount Sinai)

Personnel ..... —
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform
Material:
  Color .....dress, white; cap, white, black band
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

GRADUATES (other schools)

Personnel 23
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform
Material:
  Color .....white
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

STUDENTS

Personnel 75
Standard supply.....4 per student
Garments .....dress, apron, caps, bib, collar and cuffs
Style .....dress, one piece, short sleeve, waist, apron, bib with shoulder straps, roll collar, straight cuff
Material:
  Color .....dress, gray; all other garments white
  Kind .....dress, chambray; apron, sheeting; other garments linen

(1) Diet kitchen maid; (2) orderly; (3) waitress; (4) intern; (5) operating assistant and technician; (6) visiting staff; (7) student nurse; (8) ward attendant; (9) cleaning maid; (10) porter.

Paid for by.....original by student, replaced by hospital
Laundered by .....hospital

Preliminary Students

Personnel .....variable
Standard supply.....4 per student
Garments .....dress, apron, collar and cuffs
Style .....dress, one piece, short sleeve, stiff roll collar, stiff straight cuff
Material:
  Color .....dress, gray; apron, collar and cuffs, white
  Kind .....dress, chambray; apron, sheeting; collar and cuffs, linen
Paid for by.....wearer
Laundered by .....hospital

Ward Attendants

No. personnel..... 9
Standard supply..... 3 each
Garments .....dress, apron, collar, cuffs
Style .....dress, one piece; apron, waist, short sleeve; soft collar and cuffs, attachable
Material:
  Color .....dress, solid blue; collar, cuffs, white; apron, white
  Kind .....dress, chambray; collar, cuffs, optional; apron, sheeting
Paid for by.....wearer
Laundered by .....hospital

Orderlies

No. personnel..... 8
Standard supply..... 28
Garments .....coat and trousers
Style .....coat, military collar; trousers, regular
Material:
  Color .....cream
  Kind .....duck
Paid for by.....hospital
Laundered by .....hospital

DIETARY GROUP

Dietitian and Assistants

No. personnel..... 2
Standard supply..... —
Garments .....dress
Style .....approved for class
Material:
  Color .....white
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

Cooks

No. personnel..... 5
Standard supply.....50 aprons, 15 dresses
Garments .....dress and apron
Style .....dress, one piece; apron, butchers'
Material:
  Color .....dress, blue and white, seersucker stripe; apron, white
  Kind .....dress, gingham; apron
Paid for by.....hospital
Laundered by .....hospital

Waitresses

No. personnel..... 6
Standard supply..... 36
Garments .....apron
Style .....Hoover, reversible
Material:
  Color .....white
  Kind .....sheeting
Paid for by.....wearer
Laundered by .....hospital

Diet Kitchen Maids

No. personnel..... 11
Standard supply..... 3 each
Garments .....dress and apron
Style .....dress, one piece; apron, waist
Material:
  Color .....dress, solid blue; apron, white
  Kind .....dress, chambray; apron, sheeting
Paid for by.....wearer
Laundered by .....hospital

Porters and Pot Washers

No. personnel..... 3
Standard supply..... 10
Garments .....shirt and trousers
Style .....shirt, collar attached; trousers, regular
Material:
  Color .....olive drab
  Kind .....khaki
Paid for by.....hospital
Laundered by .....hospital

Kitchen and Dining Room Assistants

No. personnel..... 10
Standard supply..... 25
Garments .....dress
Style .....one-piece
Material:
  Color .....blue and white seersucker stripe
  Kind .....gingham
Paid for by.....hospital
Laundered by .....hospital

HOUSEKEEPING GROUP

Matrons and Assistants

No. personnel..... 2
Standard supply.....
Garments .....dress
Style .....approved for class
Material:
  Color .....white
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

Cleaning Maids

No. personnel..... 21
Standard supply..... 70
Garments .....dress
Style .....one-piece
Material:
  Color .....blue and white seersucker stripe
  Kind .....gingham
Paid for by.....hospital
Laundered by .....hospital

Porters

No. personnel..... 7
Standard supply..... 25
Garments .....shirt and trousers
Style .....shirt, collar attached; trousers, regular
Material:
  Color .....olive drab
  Kind .....khaki
Paid for by.....hospital
Laundered by .....hospital

MECHANICAL GROUP

Elevator Operators

No. personnel..... 3
Standard supply..... 10
Garments .....coat and trousers
Style .....coat, military collar; trousers, regular
Material:
  Color .....cream
  Kind .....duck
Paid for by.....hospital
Laundered by .....hospital

Inside Maintenance Men

No. personnel..... 4
Standard supply.....
Garments .....overalls and shirt
Style .....overalls with bib; shirt, collar attached
Material:
  Color .....blue
  Kind .....denim
Paid for by.....wearer
Laundered by .....wearer

Outside Maintenance Men

No. personnel..... —
Standard supply..... —
Garments .....overalls and shirt
Style .....overalls with bib; shirt, collar attached
Material:
  Color .....blue
  Kind .....denim
Paid for by.....wearer
Laundered by .....wearer

COMMISSARY

Storekeeper & Porter

No. personnel..... 2
Standard supply..... 4
Garments .....coat and trousers
Style .....coat, military collar; trousers, regular
Material:
  Color .....cream
  Kind .....duck
Paid for by.....hospital
Laundered by .....hospital

OPERATING ROOM

Doctors

No. personnel..... —
Standard supply.....jackets, 48; trousers, 36; gowns, 150; helmets, 40
Garments .....jacket, trousers, gown, helmet, shoes
Style .....jacket, military collar, tie front; trousers, straight; gown, full length, long sleeve, high neck, tie back; helmet covers mouth, nose and hair; shoes, tennis.
Material:
  Color .....white
  Kind .....optional
Paid for by.....hospital, except shoes
Laundered by .....hospital

Nurse Anesthetists

No. personnel..... 3
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform, cap to cover hair
Material:
  Color .....white
  Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

Nurses

No. personnel..... 8
Standard supply.....gowns, 50; caps, 36
Garments .....gown, cap and helmet
Style .....gown, square, low neck, separate belt; cap to cover hair; helmet to cover mouth, nose and hair
Material:
  Color .....white
  Kind .....sheeting
Paid for by.....hospital
Laundered by .....hospital

SPECTATORS

No. personnel..... ..
Standard supply... .. 24
Garments .....gown
Style .....full length, sleeveless, hanging from shoulders and covering arms and hands, tie back at neck
Material:
Color .....white
Kind .....sheeting
Paid for by.....hospital
Laundered by .....hospital

DELIVERY ROOM

DOCTORS

No. personnel..... —
Standard supply.....jackets and trousers, 18; helmets, 12; gowns, 36
Garments .....jackets, trousers, gown, helmet, shoes
Style .....jacket, military collar, tie front; trousers, straight; gown, full length, long sleeve, high neck, tie back; helmet covers mouth, nose and hair; shoes, tennis
Material:
Color .....white
Kind .. .. ..optional
Paid for by.....hospital, except shoes
Laundered by .....hospital

NURSE ANESTHETISTS

No. personnel..... 3
Standard supply..... —
Garments .....dress and cap
Style .....approved nurse uniform, cap to cover hair
Material:
Color .....white
Kind .....optional
Paid for by.....wearer
Laundered by .....hospital

NURSES

No. personnel..... 2
Standard supply.....gowns, 12; caps, 12
Garments .....gown, cap
Style .....gown, square, low neck, separate belt; cap to cover hair
Material:
Color .....white
Kind .....sheeting
Paid for by.....hospital
Laundered by .....hospital

A UNIFORMED HOSPITAL PERSONNEL

By JOHN F. BRESNAHAN, M.D., Superintendent, and HARRIET L. BORMAN, Executive Assistant, Bridgeport General Hospital, Bridgeport, Conn.

SINCE March, 1921 the entire personnel of the Bridgeport Hospital has been in uniform. This was done to promote better morale and cleanliness, as well as with a view to the effect on the public.

It is a matter of common knowledge what the uniform does for a soldier. It has somewhat the same effect on a hospital employe. A squad of men with guns, dressed in civilian clothes, may be good soldiers but they don't look like soldiers. They lack the incentive to pride in their job that the uniform gives, and it is difficult to recognize the officer or the one in authority. A squad of hospital employes in civilian clothes may be very good employes but in appearance they may be taken for convalescent patients. These employes lack the incentive to pride in their job that a uniform gives (this is especially true of cooks and food handlers), and it is very difficult for the public to distinguish between those in authority and subordinates.

Uniform Quickens Pride

The maintenance of proper discipline in the hospital family is largely a matter of example and supervision. It is surprising how supervision may be made easier by the appeal to pride. For example, in our hospital it has become a matter of tradition (less than two years old) that a soiled apron on a white uniformed food handler is a disgrace, and it is surprising to see how nearly spotless men learn to keep their white clothes by putting on a fresh apron two or three times a day. In the matter of self-discipline the uniform has proved of great aid. It is far easier for the telephone operator to give complete attention to the switchboard, dressed as she is in her blue starched gingham, than it was when she had on her pink georgette blouse which everyone had remarked was so becoming. It is a matter of interest that it has been easier for our cashiers to make and to collect proper rates, dressed in their severe business-like uniforms than it was when they wore becoming combinations of their own fancy.

There can be no debate that laundered uniforms, put on before work and taken off at the end of the day, are more in line with hospital cleanliness than the everyday garments which are often worn for considerable time. Who has not seen, even in our best administered hospitals, the soiled calico dress and spotted black waists of the kitchen maids and cleaners, to say nothing of the nondescript shirts and trousers of the male help? Who has not seen the almost universal apron of ticking, sadly in need of a good boiling, worn by the kitchen help? If asked why these varied costumes are allowed, the answer would probably be "on account of the cost of providing and laundering proper uniforms." Of the cost we shall now have something to say.

Are Not Expensive

Fig. 1 shows the hospital chef and Fig. 2 a food handler. The jackets and trousers cost two dollars each, the caps twenty-five cents, and the aprons, made by the hospital, cost for material forty-five cents a piece. Each man has four uniforms (they are changed every two days) and is allowed a maximum of three aprons per day. The life of a uniform is about six months.

Fig. 3 shows the costume of the stewardess and the housekeeper. The dress, which is made in the hospital, takes about five yards of blue romper cloth which costs twenty-two cents a yard. The collars and cuffs are made of about one-half yard of piquet cloth at thirty-five cents a yard and the apron is made of about one and one-quarter yards of strong white muslin, costing seventeen cents a yard. Two uniforms are allowed for a person.

Fig. 4 illustrates the dress worn by waitresses and ward kitchen maids. It consists of a serviceable gray gingham which costs twenty-two cents a yard. Five yards is the required amount. The aprons and collars and cuffs on all the uniforms can be reckoned at a cost of twenty-one cents and seventeen cents respectively.

Fig. 5 shows the dress of the nurses' helpers which is the same as the waitress costume except for the cap of gray material with white piquet band and the bib of apron material. The cost of these articles is twenty cents and seventeen cents respectively.

Fig. 6 shows the garment worn by the orderlies. These are obtained from a local outfitter at a cost of $5.00 complete. It is of a heavy cotton material resembling chambray, light gray in color.

Fig. 7 shows the uniform of the general workers such as engineers, plumbers, carpenters and cleaners. These are overalls with jumpers of the common variety which cost $3.60 complete.

Fig. 8 indicates the appearance of the druggists and messengers. The ordinary white coat costs $2.50 and is made of an excellent grade of duck.

(1) Chef; (2) food handler; (3) stewardess; (4) waitress and kitchen maid; (5) nurses' helper; (6) general workmen—engineers, carpenters, plumbers and cleaners; (8) office help; (9) druggist and messenger.

Fig. 9 shows the dress of the clerical force which is the same cloth as that of the stewardess and housekeeper uniforms. Its cost is also about the same. Two garments are allowed to each employe with the exception of those who wear white. They are allowed four.

Uniforms Belong to Hospital

All uniforms are the property of the hospital. When an employe leaves the institution, his uniform is sterilized and washed and sent to the sewing room to be fitted for his successor. All repairs are made on appeal to the housekeeper, and garments are renewed with no charge within a reasonable time for reasonable wear. If uniforms need renewal from abuse, they are charged to the employes. In a matter of this kind, the executive assistant makes the decision. It is a rule of the institution that no uniforms shall be worn outside the hospital grounds, thus preventing the nurse helper and the maids from posing as nurses outside the hospital. The same uniform is worn summer and winter, and no difficulty has been experienced from this regulation.

In only three or four instances has there been any objection on the part of employes to wear a uniform. These objections came from a stenographer, telephone operator, and a cashier (all on the clerical force). The objections were: "Uniforms rob you of your personality"; "they make everybody look alike"; "the color isn't becoming to me." The answer to these objections which met with acceptance were as follows: "In your particular job in this hospital, you are supposed to subordinate your personality and take on the personality of the institution, which can be described as 'for service,' and the uniform will help you do this. If you look like everybody else it is your own fault, let your manner speak for itself. Unfortunately we can't consider your particular type, you'll have to consider ours; and if you do, I think you will be surprised at how little difference it makes."

We would conclude by maintaining that the cost of making, material and laundering of uniforms has more than paid for itself in the maintenance of discipline and the increased *esprit de corps*. In our own case, the advertising value alone of the uniformed force more than offsets its cost, for the comments of visitors and patients to their friends concerning the cleanly appearance of our personnel has sent many patients to the hospital. It is a routine matter with us to ask all special nurses to take their convalescent patients through the hospital beginning with the kitchen, dining room and store. The various luncheon clubs, the Rotary, Lions, Kiwanis and Chamber of Commerce, are asked to visit the hospital each year and they are served with regular nurses' luncheon before their tour of inspection. The impression given by a uniformed personnel upon these business organizations, especially in regard to the kitchen help and food handlers, has been actually worth dollars and cents as judged from the financial and moral support given the hospital by these organizations.

Keep your face always toward the sunshine and the shadows will fall behind you.—M. B. Whitman.

LIGHTING THE OPERATING ROOM

The proper illumination of the operating room, both natural and artificial, has long been the subject of scientific study. The use of skylights, particularly vertical skylights giving north light, are recognized as the best means of natural illumination. The aim of artificial illumination is to approximate as closely as possible natural north light not only in quality but in diffusion. The direct rays from the light source must be concentrated on the operating field, yet not focused over too limited an area. Light must be directed from many angles so as to eliminate shadows being cast on the field of operation. Other factors, such as distance from the operating table and the general illumination of the room, must be taken into consideration.

Recently there has been introduced a new type of operating room light which follows the recommendations of many of the foremost lighting engineers. In this arrangement twelve prismatic angle type reflectors are mounted on a framework or directly attached to the ceiling about 10 feet above the floor. These are fitted with 75 watt daylight lamps. These lamps approximate the quality of natural north light which is of the proper color to enable the surgeon to distinguish between veins, arteries, bile ducts, healthy and diseased tissues and the many anatomical details which the surgeon must recognize instantly.

In the arrangement described above a splendid distribution of light from all directions is secured on the table. Units are arranged at a sufficient height so that the heat is not objectionable, the fixture construction is simple, and reflectors are not located directly above the table; consequently any dust which accumulates will not fall in the wound. Since the prismatic reflectors transmit a certain percentage of light no general illumination is needed in addition. Measurement of the illumination produced by such a layout indicates the following intensities; between 40 and 50 foot candles on a horizontal plane; from 20 to 30 foot candles on the 45 degree planes; and from

10 to 20 foot candles on vertical surfaces above the table.

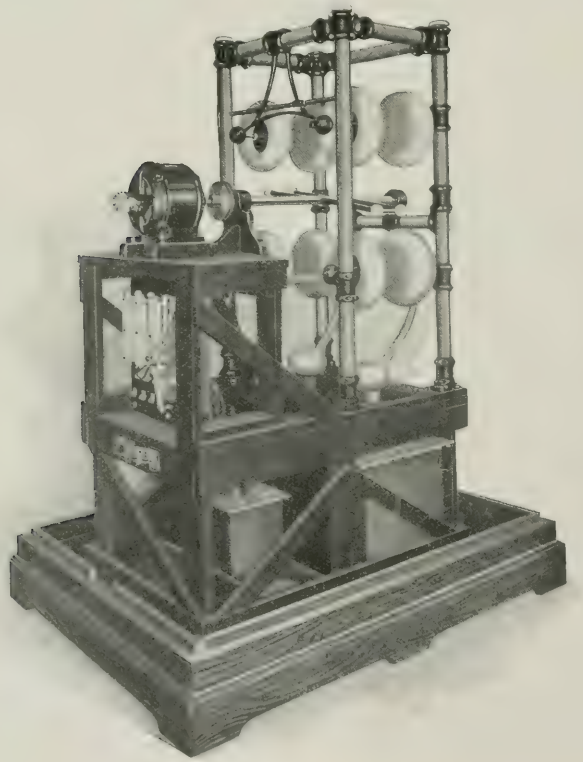
With this fixture concentrated light is directed not only on the immediate operating field, but over the entire area occupied by the operating table. This plan likewise obviates much of the danger of objectionable glare if the surgeon chances to glance upwards, which factor exists in lights more closely focused.

The design of this fixture coupled with the use of the so-called daylight incandescent lamps apparently provides illumination of proper quality and properly concentrated intensity to meet every condition in the operating room.

DEEP THERAPY-DIAGNOSTIC X-RAY APPARATUS

More than ordinary interest has been shown by hospital administrators in the recent development of high voltage x-ray apparatus for deep therapy purposes. Regardless of the definite results and marked progress that has recently been made in the science, many hospitals have hesitated to install the necessary equipment for deep therapy. This is particularly true since the earlier high voltage outfits could not be adapted to general diagnostic and radiographic work. A number of hospital administrators have recently inquired as to whether a single outfit was not available that would combine facilities for the routine diagnostic and radiographic work in the institution, with necessary capacity for deep therapy.

Such a combination outfit has recently been introduced to the field; it offers a voltage capacity over a range of from 30,000 volts to 200,000 volts. For deep therapy the machine will have a continuous running capacity of 30 milliamperes, considerably in excess of the milliampereage capacity of the present Coolidge deep therapy tube. To demonstrate its running capacity the manufacturers have simultaneously energized ten Coolidge deep therapy tubes at 200,000 volts with three milliamperes passing through each tube.



This result is made positive by the imposition of a stabilizer for each circuit by which it is possible to increase or decrease the milliampereage in any of the ten tubes, without affecting the milliampereage through the remaining tubes. This stabilizer is likewise of great importance in radiographic work.

Has Electrostatic Balance

The first impression of those who have seen the new machine is that of symmetry of design and finished workmanship. There is a conspicuous absence of projecting points, loose ends, nuts and bolts. While the design of the machine was not primarily worked out with the sole idea of appearance in mind, attractiveness has been incorporated. In reality the outward mechanical appearance is but a cloak, behind which is hidden the predominating feature of the machine as a whole, and that is electrostatic balance.

Designers in the electrical field in general make daily use of the principles of the electrostatic balance in the design of apparatus, particularly of high voltage type. In the x-ray field in the past, some attention has been paid to this but in this new machine every care has been used to carry out fully the principles of electrostatic balance in order to obtain operation as free from corona, voltage surges and and unbalanced electrical stresses as it is possible to obtain.

It is a well known fact that where an electrostatic field, such as is set up in high-voltage x-ray machines, exists, there are different electrical stresses set up between the parts. The character of these stresses is determined principally by the shape of the parts and the distances between them. If every part is of a certain area and shape and so placed in relation to the others that when the voltage is raised all parts reach their voltage break-over point at the same time, there will not be the slightest tendency of spark-over occurring at any one point. In the new switch all parts are so placed and of such a shape as to cause the air to be equally stressed between them. The net result of this is the elimination of a possibility of corona and the suppression of high voltage surges which effect tube operation. This can be demonstrated with this outfit by raising the voltage to the limit of the design of the machine where spark-over occurs, when the voltage will jump between all parts at the same time instead of having a tendency to concentrate at first between two particular joints.

The key to this system is the use of stationary electrodes designed in the form of electrostatic shields, and the placing of connected parts in such a way that the shields carry the electrical stresses, leaving the small parts to function as supports only.

This system of shields protects the insulation in the switch frame.

In addition, the clamps and couplings not directly in the electrical circuit are designed to stress the insulation equally. This makes it possible to obtain the maximum value of the insulation, as no undue stresses are produced at any one point. The shaping and placing of all metal parts is such that spark-over takes place between metal sections without tendency to include the insulation in the sparking path.

System of Shields Protect Insulation

The switch frame proper is made up entirely of insulated paper posts and cross pieces. As will be seen from the photograph, the light stationary electrodes are mounted on four insulated posts. The switch shaft is of metal and the rotating part of the switch consists of two insulated rods going through the shaft, having a metal ball-shaped connection at each end of aluminum. The advantages of this construction are at once quite apparent. The necessity of carrying current through the switch shaft is avoided, and a very small, light moving element can be used, giving good mechanical construction all around.

Switch Construction Is Unique

Another important advantage of this type of switch construction is that all the insulation is transferred to the switch frame, and by being able to use insulated paper pieces of large size it is very easy to provide the proper voltage insulation. This is a feature found in no other machine and is a departure from all previous types of switch construction. The design of the stationary electrodes is entirely novel for x-ray work, the shapes and curves being worked out to provide for the electrostatic balance previously described. All corners have rounded surfaces, screws even being placed in recessed pockets to eliminate corona points.

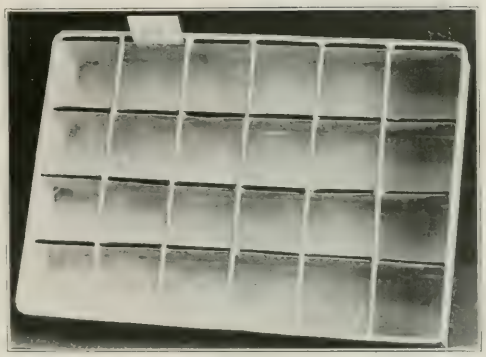
Another advantage which will be appreciated by those who are located in sections where the humidity is high is the fact that this design of switch comes nearer being proof against leakage troubles from this source than any previous design.

SYSTEM OF ADMINISTERING MEDICINES AT GRANDVIEW HOSPITAL

By A. W. STREICHER, Superintendent, Grandview Hospital, La Crosse, Wis.

The Grandview Hospital of La Crosse, Wis., has recently developed what it believed to be an almost mistake-proof system for the administration of medicines.

The hospital has thoroughly tested this new system for several months. It is a great convenience to the nurses in charge of floors in the hospital, saving them much time and facilitating their work, as well as guarding against possible errors.



Reference to the photographs, reproduced herewith, shows the simplicity of the system. It makes administration of the correct medicine to each patient virtually automatic, insures their being given exactly when and how prescribed by the physician, and eliminates the necessity of the nurse in charge consulting the chart each day, and the former book method.

Briefly, the component parts of the system are a metal card holder with twenty-four sections, each indicating an hour of day or night, and a compartment medicine glass tray, with slots for the patients' cards. The method of use is as follows:

For each patient upon entering the hospital, small cards are made out by the head nurse. Upon each card is shown the patient's name and room number, the number of the prescription ordered, and the hour at which the dose is to be given. If the medicine is to be given more than once during the day of twenty-four hours, a separate card is made out for each hour's dose.

For instance, if after-meal medicines are to be given, three cards will be made out and placed in Sections 8, 1 and 7 of the medicine card holder. If before-meal and bedtime medicines are ordered, four cards are made out and placed in the corresponding sections. A two-hour medicine calls for seven cards, etc.

A tray divided into sections, each of which securely holds a standard medicine glass, is used by the nurse in distributing the medicines. Each section has a slot to receive the medicine cards, thus guarding against confusion of doses intended for different patients.

To illustrate how the system works out: At the hour of 7 a. m., for instance, the nurse in charge takes from the card holder all of the cards in section No. 7. Finding five cards, she transfers them to the medicine tray, placing each in a slot of one section of the tray. Then she visits the prescription cabinet and places the prescribed medicine in each glass, consulting the card of each compartment for the prescription number ordered. She makes a trip around her ward or rooms, giving each patient the required medicine, practically to the minute of the doctor's schedule, and saves herself a number of extra journeys from bed-chart to prescription cabinet and return.

The two upper tiers of the medicine card holder are lettered in black, to indicate day medicines. The two lower tiers are in red, to distinguish from the night medicines. Six o'clock is the dividing hour of the day at Grandview Hospital, permitting an even division of the holder. At this hospital, four sets of holders, cards and trays are in use, one for each floor of the hospital, in order to speed up and simplify the work.

FOLDING GOODS IN THE HOSPITAL LAUNDRY*

By WALTER T. WILLIAMS, Cincinnati, Ohio.

A STANDARD method of folding apparel in the hospital laundry is desirable for several reasons. While it is true that most articles may be folded in at least two or three different ways, all of which may seem equally good, it is best that a given article always be folded in the same way.

Fig. 1.
Section of a laundry assorting department, showing the compartments into which the articles are placed in order to assemble the bundles.

First of all, the folds of articles should be so arranged that when the pieces are placed on the assorter's table she either will see the marks or will know where to turn up an edge of the goods to locate them. It is not always possible to have the marks folded *out*, and where they are folded *in* they always should be in the same place, so the assorter will not have to hunt for them. This, as has been explained, involves uniform placing of the marks as well as uniform folding.

In the absence of anything that approaches a standard system of folding apparel, the best I can do is to describe and illustrate methods that are used in well-managed hospital laundries, resorting to commercial laundry practice where it seems best to do so. It is possible that in some instances these folds will have to be modified to fit the requirements of a hospital, but in all cases it will be found that the basic principles may be used.

Fig. II.
A pile of shirts that are marked in an unusual way, but one that facilitates the assorting.

As the folding of apparel and its subsequent assorting are operations which are closely related, it may be well to add a few words on the latter subject at this time. After the pieces have been folded it is necessary to assort them, which means that the various articles belonging to each person must be brought together. The usual practice is to assort the pieces into large compartments, or pigeonholes, one section being assigned to a person. An idea of this may be had from Fig. I.

As the folded pieces must be assorted into these compartments, it is evident that they must be folded small enough to go into them; but one should remember that if pieces are folded too small they will be hard to wrap into bundles. The ideal condition is to have all articles the same size after the last fold, for when they are assembled one has a uniform pile which has no tendency to topple over and which is easy to wrap into a neat bundle.

Fig. III.
Basic folds of man's shirt

Fig. II shows a method of marking and piling shirts which simplifies the assorting operation and saves time. Instead of marking the shirts by the usual method, which consists of placing the mark inside of the neckband, the mark is best placed on the outside, near the back buttonhole.

Shirts.—Fig. III shows the basic folds of a man's shirt, a negligee with soft cuffs, the one that is the most popular for general wear at this time. It may be well to note at this time that these are the basic folds of nearly all of the other articles that have sleeves, whether for men or for women. The shirt is folded as follows:

Fasten the neckband and the bottom button and place the shirt on the table, button side down, spreading it out flat; (1) fold the right sleeve across the shirt; (2) fold it down the center of the shirt; (3) fold the left sleeve in the same manner; (4) fold over the right side, about an inch from the neckband; (5) same as 4; (6) fold across narrow way, in center.

The cuffs in this shirt are folded and they are fastened with what is known as a "bend-over" cuff fastener, which is a small wire that is covered with thick paper. If the cuffs are not folded it will be necessary to change the second fold of the sleeves, letting the open cuff rest lengthwise of the shirt. Stiff-bosom shirts may be folded the same way.

Fig. IV.
Folded shirts. The one on the left is not pinned together in the customary way—but the folds are held by a transparent paper cover.

*This is the second in a series of three articles on folding goods in the hospital laundry.

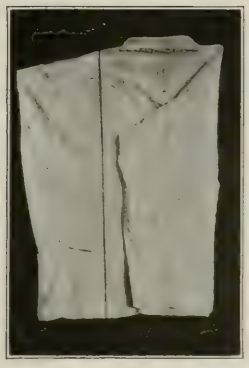


Fig. V.
Pajama coat, partly folded. The black line shows where the next fold should be made.

If there are many shirts to be folded it is well to have a little device that is on the market, which consists of a table and a hinged metal plate, over which the folds are made, it serving as a guide. Sometimes the shirts are folded over a piece of cardboard, eight by sixteen inches in size, as this insures uniformity.

Fig. IV shows two folded shirts. The one on the left is what is known as the "pinless" variety; that is, one does not have to search for and remove a lot of pins before he can put it on. The hospital laundry manager who wants to please the doctors and other personnel will adopt this system. The cardboard is left in the shirt; the cover of transparent paper is fastened by means of gummed stickers.

Pajama coats.—Fasten the top and bottom button and spread the garment on the table, with the button side down; (1) fold sleeves across and downward; (2) fold lengthwise into thirds; (3) fold across center, narrow way. This method is shown in Fig. V, the black line indicating where the left side is turned over. The folded garment is shown at the left, in Fig. VI.

Pajama trousers. — The usual method seems to be: (1) fold from waistband to crotch, superimposing one leg on the other; (2) across leg, in center, as shown in Fig. VII; (3) parallel to 2, in center, as shown in Fig. VI, on right side. This garment, as shown by the picture, was marked on the inside of the waistband, which is turned over so that the mark may be seen.

Pajama unions.—One-piece pajama suits, or unions, are beginning to be adopted by some. These may be folded as follows: Fasten the top and bottom buttons and spread the garment on the table, button side down; (1) fold from collar to crotch, bringing the legs over each other and sleeves down straight; (2) fold lengthwise again, bringing over the coat; (3) across center, narrow way; (4) parallel to 3, in center.

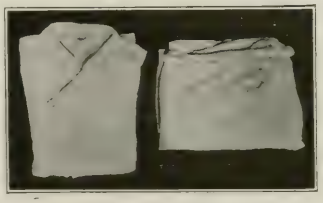


Fig. VI.
Pajama coat and trousers, both folded. The waistband of the trousers is turned over to show the mark.

Night robes.—The basic folds of these are the same as those of a shirt or a pajama coat, as shown by Fig. VII. Fig. IX shows the folded garment, with the mark plainly visible, as it should be after folding, whenever it is possible to do so.

Underwear. — There is such a variety of men's undergarments that space does not permit a description of the folds of all. The shirts may be placed on the table button side down and folded lengthwise into thirds, the same as an ordinary shirt, then folded across the narrow way. This leaves the mark where it can be seen. The drawers may be folded the same as pajama trousers. The folds of a union suit may run from top to bottom, the same as with an undershirt, and cross folds may be added until it is the proper size. After the final fold, the garment should be about the same size as a folded shirt.

Fig. VIII.
Night shirt, part folded. The black line indicates the next fold.

Coats.—Button the garment, turn up the collar, if it has one, and place it on the table, button side down. Fold lengthwise into thirds, similar to a shirt, bringing the sleeves straight down the center; then fold across the center, narrow way.

Trousers.—Fold the same as pajama trousers, but press in the seat, to give an even edge. If you can avoid it, do not make more than one fold across the legs.

Overalls.—The waists of these may be folded the same as pajama coats; the trousers may be folded the same as ordinary ones, and the one-piece overall may be folded the same as a union suit. In case of overalls that have a bib, fold this down and proceed as with the trousers.

The foregoing embraces most of the articles that men send to the laundry. Women's waists are folded similar to shirts, but with one fold omitted if they end at the belt. Other garments are similar in shape to men's underwear, and these are folded in a similar manner. Women's pajamas, of course, may be folded the same as men's. In the next article will be described the folding of miscellaneous articles that are used in the hospital, such as nurses' uniforms and aprons, patients' bed gowns and ordinary night gowns, an item which is given small consideration.

Fig. VII.
First and second folds of pajama trousers. The third fold is across the legs, in the center of the garment as it now is folded.

Fig. IX.
Night shirt folded, with mark plainly visible to the assorter.

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary Committee on Dispensary Development, United Hospital Fund of New York, and Chief, Service Bureau on Dispensaries and Community Relations of Hospitals, American Hospital Association, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association 370 Seventh Avenue, New York

BRITISH COMMENT ON THE TENTATIVE STANDARDS OF THE ASSOCIATED OUT-PATIENT CLINICS

By SIR NAPIER BURNETT, K.B.E., M.D., Director, Hospital Service Department, Joint Council of British Red Cross Society and Order of Saint John of Jerusalem in London, England.

Sir Napier Burnett's comments on the tentative standards of out-patient work drawn up by the Associated Out-Patient Clinics of the city of New York will attract attention from hospital administrators generally. In addition to several of Sir Napier's detailed suggestions, particular interest will naturally turn to his indication of the decline in Great Britain of the dispensaries unattached to hospitals. This he connects chiefly with the development of national health insurance during the last ten years.

In this country, without any state health insurance, there has gone on a marked change in the relation between the hospital and the dispensary. The original dispensaries in Great Britain and in the United States were unattached to hospitals, and were chiefly centers for brief medical examination, more particularly for the dispensing of medicines. During the present generation, very marked extension of the scope of the dispensary has taken place, particularly in that it is now recognized that the out-patient clinic is essential to enable the hospital to perform its work adequately and economically. Only through the connection of the out-patient clinic with the hospital can the ambulatory, as well as the terminal or incapacitating stages of many diseases, be studied and treated, and only through close connection of out-patient and hospital can the maximum economy of hospital bed days be achieved.

During the same recent period when numbers of hospitals in the United States have added out-patient departments, there has also been a great increase in the dispensaries unattached to hospitals, and these dispensaries have been of an entirely new type. Instead of being almost exclusively for dispensing medicine, with, one might say, medical treatment as an incidental, they have been established as public health clinics, agents in the campaigns against tuberculosis, infant mortality, mental diseases, venereal diseases, etc.

The public health movement on the one hand, and the demands of modern medical science for more complete hospital service, on the other, are jointly responsible for the development in the United States within the past twenty years of twenty times the number of dispensaries which existed in this country at the opening of the present century.—Editor's Note.

IN GREAT BRITAIN there formerly existed a large number of out-patient clinics or dispensaries, independent institutions not connected with the intern department of a general hospital.

But since the advent of the national health insurance act many of these clinics have ceased to function, for patients now have the right of access to the private medical practitioner and of their own free choice may go on his panel of patients.

The result is that dispensary practice is now almost restricted to the out-patient clinics which form an integral part of every fully organized general and special hospital. The following observations, therefore, are based on the working of those out-patient clinics forming part of the hospital routine. In my opinion most of the standards laid down in the memorandum of the Associated Out-Patient Clinics of the City of New York are admirable and could readily be accepted as desirable; in fact such standards are now followed in this country *in theory;* but the standards imply a degree of coordination that does not really exist *in practice.* I would offer the following three observations as worthy of the consideration of those responsible for the establishment of an associated service of out-patient clinics:—

It is not generally recognized that the volume of work in the out-patient department of a large general hospital is such as to make it almost impossible for the medical personnel to overtake it with efficiency. Much of the valuable time of the physicians and surgeons is wasted in dealing with trivial details.

There is need for a sorting department in which the patients will be dealt with in the first instance; such department should be presided over by a medical officer of considerable experience, who would segregate the patients to the appropriate sections of the clinic.

In too many instances this important work devolves on a clerk or attendant or sometimes on a junior medical officer or nurse, whereas the work should be in the hands of a medical man of ripe experience and judgment.

This primary sorting out of the patients in an adequate manner is the first essential step that will lead to a successful out-patient clinic.

Dispensary practice constitutes a direct challenge to the medical profession. The practice at present in vogue in regard to hospital appointments is that when a young physician or surgeon is appointed to the staff of a hospital, his duties are restricted almost entirely to the out-patient department and, having gained experience in that department, he becomes in course of time a candidate for promotion on the staff to an appointment in the wards.

Such a system implies that the experienced man leaves behind him the out-patient clinic and devotes his energies to those phases of clinical work as revealed in the medical and surgical wards of the hospital.

Clinical ward work deals in a large measure with disease in its more fully developed aspects, in other words,

with the end products of disease, whereas in the out-patient clinics disease is seen in the early stages and therefore it does seem reasonable to suggest that the out-patient clinic should have its personnel drawn from the more senior and experienced members of the hospital staff —men of mature judgment capable of conducting an active and aggressive warfare against disease in its early and, therefore, curable stage.

Further, it is surely in the out-patient clinic that the experienced medical officer would be in a position to render great service in the teaching of medical students from the wide range of common ailments in daily evidence at the clinic which the future practitioner of medicine will be called upon to deal with.

A group of associated out-patient clinics should be associated with a preventorium located in some healthy country or seaside district.

The internal department of a hospital in a large measure draws its patients from the out-patient clinic or dispensary. But there are large numbers of patients interviewed daily at out-patient clinics who might be prevented from ever developing into the stage when admission as an in-patient becomes necessary by having them, in the early stages of their disease, short-circuited to a preventorium. During the Great War, the medical profession seemed to rediscover the value of fresh air and good food in the treatment of many medical and surgical diseases, and the great lesson thus learned should be applied to many of the patients that daily attend the out-patient department.

In association perhaps with the local municipal authorities who are concerned with the prevention of disease and the general welfare of the community, a preventorium should be established to receive those patients certified by the medical officers of the clinics as suitable and likely to benefit by a residence of two to three weeks in fresh air, and to obtain rest and good food.

Such a preventorium should be inexpensive as compared with hospital treatment, for the only technical equipment required would be facilities for estimating the primary blood condition and noting progress of the patients as recorded by the weighing machine.

A DISPENSARY CAFETERIA

By A. K. HAYWOOD, M.D., Superintendent, Montreal General Hospital, Montreal Canada.

THE trend of modern hospital administration is undoubtedly towards a better understanding of the patients' needs, not only medical but social. Our hospitals are becoming more human in their dealings with those who apply for relief. As a result, many subjects are being discussed in the hospital journals and at our conventions under the heading of "Better Service to the Patient."

An opportunity for bettering our service to the patient was brought home to me very forcibly last winter. During a conversation with the nurse in charge of the out-patient department, she made the suggestion that she be allowed a certain amount of tea, sugar, bread and butter per day. On closer inquiry it was discovered that an unusual number of patients visiting the dispensary were fainting during examination, because some of them had received no breakfast and were being detained in the dispensary all day for various examinations. This hospital is in a very congested district and while there was plenty of opportunity and time for the purchase of food in restaurants, the patients did not have the necessary funds for this purpose; it was the nurse's intention to provide a small lunch for them.

The lunch counter for out-patients at Montreal General Hospital

The idea occurred to us at that time that here was an opportunity of doing a real service to the out-patients. I had seen on a visit to the Massachusetts General Hospital an endeavor to meet this problem in its out-patient department.

Philanthropic friends of the hospital were approached, and as a result some $400 was collected to build and equip a lunch counter. Fortunately the space was available in the rotunda of the dispensary, and in no time the interest of all was aroused in this novel experiment. Carpenters and the mechanical staff of the hospital donated their time to building it after working hours.

The following is a list of equipment that it was thought necessary to start with:

Coffee urn — Dish sterilizer
Tea urn — Cups and saucers
Sink — Paper plates
Sandwich plates

Prior to its completion the question of waitresses was gone into, and it was soon found that here was a real stumbling block financially. However, this was overcome by a group of young ladies known as the "Junior League" who offered to staff the cafeteria. They come in turns weekly, and make their own sandwiches, coffee, and tea, wash the dishes and do all the serving, and it is due to their untiring efforts that this lunch counter has turned out to be an unqualified success, not only from the service it is rendering, but financially. For in spite of the fact that food is served more cheaply and cleaner than in most restaurants, we have made a profit of $100 a month on it. This profit has been turned over to the social service department as a donation from the Junior League and has been the means of establishing and maintaining a nutritional clinic.

Both the social service workers and the nurse-in-charge of the dispensary are empowered to issue as many tickets for free meals, as they deem necessary. Those who can pay our modest prices are asked to do so.

This lunch counter had only been in operation a few days when the medical students made a request that they be allowed to purchase their lunch at it, and it has been a great source of comfort to them to be enabled to purchase a clean lunch in the short time allotted for this purpose by the university, and especially during our rigorous winter season.

It has always been the custom for this hospital to allow the relatives of patients on the danger list to remain at the bedside of the patient during this critical period. The nurses in the wards were frequently consulted as to the possibility of the hospital furnishing meals to these visitors, and while this has been the custom in the private wards, it was not practicable in the public wards. The lunch counter has brought about the solution of this problem also.

The Montreal General Hospital had a dispensary attendance last year of 150,000 visits. Its patients are drawn from a radius of fifty miles, and from the newspaper publicity and remarks that one frequently hears there is no doubt that our lunch counter for the dispensary has come to stay.

THE PASADENA DISPENSARY

By MYRON HUNT, Architect, Los Angeles, Cal.

IT WAS through the inspiration of Mrs. William C. Baker that in 1914 the Pasadena hospital board appointed a committee to consider establishing a dispensary in connection with the hospital. Later a permanent building committee was formed and operations were rapidly carried forward.

Owing to the generosity of members of the auxiliary board and others, the required funds were raised and the original dispensary building was erected, the building costing $4,714, and its first equipment $830. In October of 1915 the auxiliary board held its first meeting in the new building.

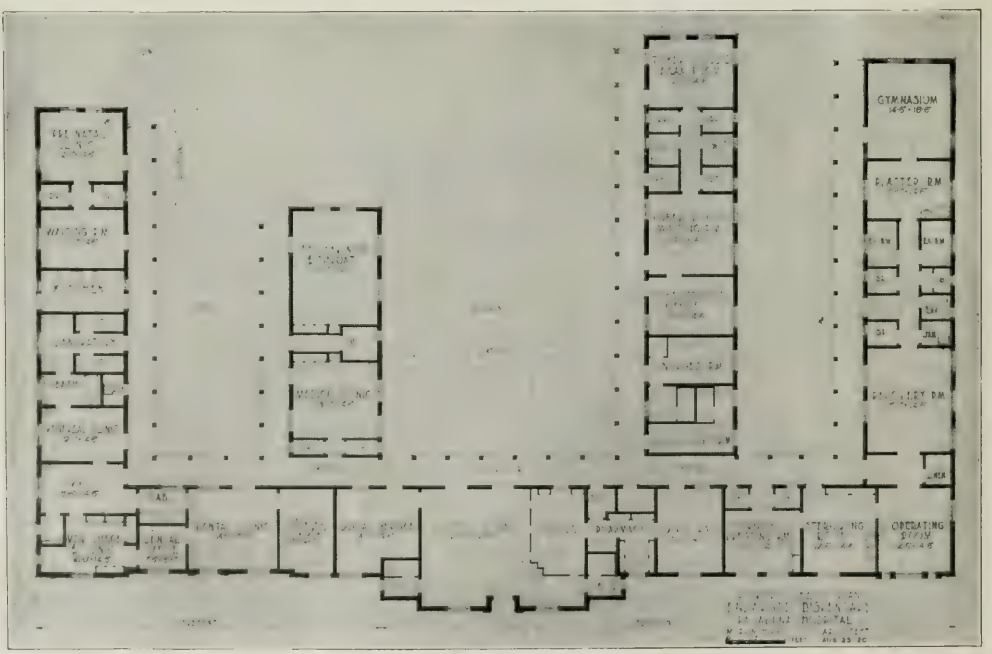
New Building Erected in 1920

The work and scope of the dispensary gradually assumed such proportions that the old building proved to be inadequate to the demands made upon it. In the spring of 1920 the dispensary board lent their efforts to the big drive that the hospital launched for a larger and better equipped hospital, and received $25,000 as their share of the amount raised. This money was promptly expended in building and a splendid new unit was erected.

The dispensary is an out-patient department of the Pasadena Hospital and is maintained almost entirely through public generosity and subscription. There is no similar institution in the city, hence there is no duplication of its work.

It is open to all, irrespective of nationality, age or sex. It is "non-pauperizing," as a small charge is made for every treatment, except where the patient is unable financially to pay for it. Then no charge is made.

It has its own medical staff of twenty-five physicians, who serve without pay, except the dentist, whose salary is paid jointly by the board of education and the city.



General plan of the Pasadena Dispensary.

There is a utensil lift that stays right

(The Superintendent and the Surgical Nurse were talking. Series X.)

"*Miss Smith, I specified Castle Utensil Sterilizers on that County job the other day, but the board wants to save money with another make. What do you think?*"

"They may save a few dollars now, Doctor, but they will spend it later in repairs."

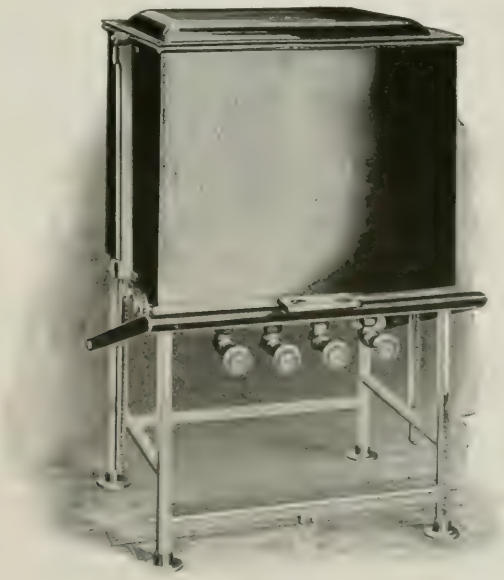
"*But what is there about a Utensil Sterilizer to get out of order?*"

"Plenty, Doctor. Didn't you ever see nurses pulling a sheet full of utensils out of a sterilizer after the lift had gone wrong? It's too heavy for them, they get scalded, and it's always sloppy. No, Doctor, you must have a cover and tray lift that will always work. On this one see how the weight is carried on the frame, not on the sterilizer."

"*You are a great Castle booster, but I admit these Castle's relieved us of a lot of trouble.*"

"And remind the board that they can keep paint and plaster on the walls near the sterilizer too. Remember that steam vent?"

"*Yes,—*"



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Send for Castle Sterilizer Specifications

WILMOT CASTLE COMPANY, 1151 University Ave., Rochester, N. Y.

Makers of the largest line of sterilizers for Hospitals, Laboratories, Physicians and Dentists

The Dispensary, Pasadena Hospital, California, from the architect's drawing.

Eleven clinics are maintained: (1) eye, ear, nose and throat; (2) tuberculosis; (3) dental, (4) venereal, (5) medical, (6) surgical, (7) gynecological, (8) pediatrics, (9) prenatal, (10) orthopedic, (11) well-baby.

Various Clinics Show Rapid Growth

The latest annual report of the dispensary shows that in addition to the large number of adults treated in the dental clinic, 2,742 school children were examined, more than sixty per cent of whom needed attention. This is one of the most important works of the dispensary as it has become universally recognized that the proper care and supervision of the growing child's teeth prevent diseases of later life.

The venereal clinic has brought to light the great need of such medical work in Pasadena. The monthly attendance is very high; men, women and children are being regularly cared for. The treatments are inexpensive ($1.50 for each one) and in many instances they are given free.

Children predominate in attendance at the tuberculosis clinic. Most of these children come from tuberculous parents and are being carefully watched to insure against the development of any active cases. The nurse in charge of this department covers the entire city of Pasadena and parts of Alhambra, South Pasadena and Altadena in her home visits.

The eye clinic is one of the largest. A monthly average of twenty prescriptions are given for glasses; in most instances these glasses are paid for by the dispensary.

The main entrance to the dispensary.

The new orthopedic and the gynecological clinics are growing rapidly. Steady attendance is also reported at the eye, ear, nose and throat, medical, pediatric, prenatal and surgical clinics. The well-baby clinic has become quite a feature of the dispensary. It is held weekly and has grown to such proportions that it requires the services of more than one physician to weigh and examine all the babies brought in.

In addition to the above clinics, formulas of modified milk are prepared for nursing babies.

Approximately 7,500 treatments are now being given annually, and the demand is constantly increasing.

A grassy court between wings. One of the three courts is paved, but all open from verandas where benches are conveniently placed for waiting patients.

Looking down the corridor from the gymnasium, which is an interesting feature of the dispensary's work.

Adv. page 46

LEADING hospitals, who realize that pleasing variety in food is almost as essential as nutrition, are using KNOX SPARKLING GELATINE in ever-increasing volume.

They recognize its value not only as an important protein-sparer—not only as an aid to digestion—but as a pleasant, wholesome means for conveying to the patient, in tempting variety, such staples as milk, eggs, broths, vegetables, and fruits.

For purity, quality, and strength, physicians, dietitians, and all leading food authorities recommend

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"Always the Highest Quality"

OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by HERBERT J. HALL, M.D., Devereux Mansion, Marblehead, Mass., and MRS. CARL HENRY DAVIS, Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.
Co-Editors: LORING T. SWAIM, M.D., 372 Marlboro St., Boston Mass., and MISS MARY E. P. LOWNEY, Room 272, State House, Boston, Mass.

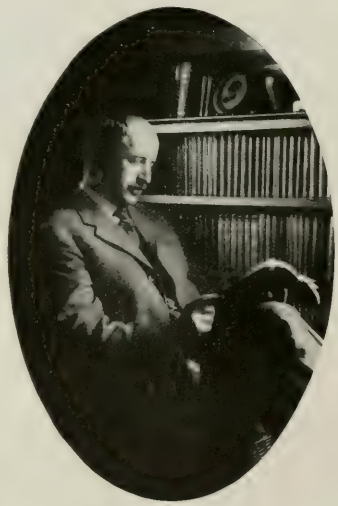
A BIOGRAPHICAL SKETCH AND AN APPRECIATION OF HERBERT J. HALL, M. D.

HERBERT JAMES HALL, pioneer in the treatment of nervous diseases by occupational therapy and for three years editor of this department of THE MODERN HOSPITAL, died at Devereux Mansion, Marblehead, Mass, on February 19, after a long and severe illness. Born March 12, 1870, in Manchester, N. H., where his early boyhood was passed, he was graduated by the Harvard medical school in 1895. Two years later he moved to Marblehead, and married Miss Eliza Pitman Goldthwait of that town and it is due to her unfailing interest and proficient assistance that many of Dr. Hall's conceptions were realized. Mrs. Hall, a son and a daughter survive.

Dr. Hall carried on a general practice for many years but he always had particular interest in nervous patients and felt that carefully prescribed occupation had a valuable contribution to make in their convalescence. In 1904, having found a skilled craftswoman and an able assistant with equal vision in Miss Jessie Luther, a small house was taken in Marblehead. It was here in this "Handcraft Shop," with its wide piazzas, overlooking the harbor, that the first demonstration of occupational therapy as we know it and apply it today was begun.

Pottery, weaving and basketry were the first crafts used. Metalwork and carpentry were added the following year when another building was taken to house this rather noisy work. Dr. Hall never ceased to relish the sight of patients, who cringed at the slamming of a door or complained continually of small sounds, becoming completely oblivious to the racket of the shop when they themselves were hammering copper or sawing wood. "Carefully regulated work is a remedy of the first order. When used with care and discretion there is no better way of separating the real from the imagined, and no better way of leaving fear and unhappiness behind."*

Year by year, as the success of the work became evident and patients came to Marblehead in increasing numbers for this "Work Cure," buildings were added to meet the needs until in 1912 Devereux Mansion was established as a sanitarium for nervous diseases. At that time Dr. Hall gave up general practice and devoted his entire time to the study and care of nervous patients. Recognizing physical weakness and disabilities frequently accompanying nervous disorders, much of the treatment at Devereux Mansion, carried on in collaboration with Dr. Joel E. Goldthwait, was for the correction of posture and the restoration of function.



Herbert J. Hall, M.D.

Being convinced that his theories on occupation as a means of treatment in both mental and physical illness had proved correct, much time was spent in the development of the workshop. A large barn was adapted to the purpose and today the shop at Devereux Mansion is a unique and delightful place with an atmosphere of calm and cheer and industry. Starting as a rule with the mechanical and monotonous processes of cement work the patient progresses to basketry and toy making and eventually to weaving. Here in a large room open to the rafters are many looms comprehensive of all types of weaving, from the simplest forms to the most intricate of pattern weaving. "The convalescent must creep before he can walk; he must walk before he can run." It was this principle that Dr. Hall followed in his application of occupational therapy.

The Devereux Mansion loom is the result of tireless study and adaptation, and the beautiful weaving silks for which the shop is known the outcome of years of experimentation. The Marblehead Pottery, now of wide repute, began in Dr. Hall's first shop. The Medical Workshop, also in Marblehead, which specializes in both finished and "rough-hewn" wooden toys for hospital use with the purpose of giving to the public and occupational therapy workers toys of unusual and artistic design is again the fruit of Dr. Hall's creative imagination.

*All quotations are from Dr. Hall's own books.

A Big Drop in Institutional Size

JELL-O

AMERICA'S MOST FAMOUS DESSERT
JELL-O
A MIXTURE
SPECIAL PACKAGE
MAKES FOUR QUARTS
RASPBERRY
PURE FRUIT FLAVOR
VEGETABLE COLOR
This package makes four quarts of Jell-O. Serves forty to fifty persons according to size of portion
THE GENESEE PURE FOOD COMPANY
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Institutional Size
makes one gallon

$6.80 a case from the jobber

PINEAPPLE WHIP
1 Institutional Size Lemon Jell-O
2 cans shredded pineapple
2 quarts boiling water

Dissolve the Jell-O in the boiling water. Drain the juice from the two cans of pineapple, add enough water to make two quarts and add to the dissolved Jell-O. When cool and still liquid, whip according to directions on package. Stir the pineapple into the whipped Jell-O when it is thick enough only to drop—not run—from the spoon. Set away to harden.

A case contains twelve cans—sufficient for twelve gallons of Jelly. An individual serving of plain Jell-O costs about one cent. A delicious pineapple whip about two cents.

"America's Most Famous Dessert"

MANUFACTURED BY

The Genesee Pure Food Company
Two Factories

LeRoy N. Y. *Bridgeburg, Ont.*

During the past twenty years Dr. Hall has been a constant contributer to the medical journals with articles on the neurasthenic, the value of systematic work in the treatment of nervous diseases and in all convalescence, and he has laid great stress on the place of graded occupations in the salvaging and reclaiming of the permanently handicapped. His books, "Handicrafts for the Handicapped" and "The Work of our Hands," are text books on occupational therapy and will always be authoritative and inspirational in this field of service. He is responsible also for two charming volumes of poems. "The Sea World Waits," published during his illness, is composed largely of simple and beautiful pictures of the sea in all its moods and from which one feels he has drawn his philosophy of life.

Dr. Hall gave generously and gladly of his knowledge and services during the World War. No detail was too small for his interest. His theories were the foundation for the treatment of the shell-shocked victims and for the establishment of the wide program of rehabilitation beginning with occupational therapy. He helped to organize the first war courses for this work in Boston, also later the Massachusetts Association For Occupational Therapy. During 1921 and 1922 he was president of the American Occupational Therapy Association where his untiring interest and enthusiasm did much in establishing the recognized place that this organization holds in the medical world today.

Dr. Hall was a man with exceptional appreciation of the beautiful, and of fineness in his fellow men and his surroundings, and a great lover of music. Although reserve and modesty, to which in later years increasing deafness added almost a touch of shyness, characterized him, one could not feel these qualities due to lack of self-confidence or poise, but rather that life was to him a serious thing which had been weighed and balanced to meet necessity—not possibly his inmost desires This seriousness was lightened by a vivid and keen sense of humor that flashed out in unexpected moments like sunshine on the sea he loved so well. He was a dreamer in the highest sense of the word; an idealist with vision and imagination. To these attributes we owe his pioneer work in occupational therapy and his faith in the future possibilities of this field. To these also is due his understanding of his patients. "There must be hope and courage, there must be a conception of life fine enough and big enough to bridge all gaps with sufficient faith and understanding. There must be a wholesale clearing away of old and hampering misconceptions, a lightening of fears and other mental burdens." All this he gave to his patients.

The world has lost a man with scientific foresight; his patients an understanding counsellor; his friends a sympathetic companion; and the service of occupational therapy has lost a sponsor, a mentor and a friend who can never be replaced.

Triumph

"All, all is taken from me, all—
I know but heavy sorrow and the long
Insistent pain that comes of hopeless wrong.
The heavens that were loved and beauty fall—
Joy and laughter are beyond recall,
Yet shall the barren places hear my song,
Yet shall the courage of my faith be strong,
Unmoved, resistant like a great sea wall.

For in the barrenness of life I feel
A dignity and greatness that can be
Naught but the hand of God. Cold and bare
The sloping shores, merciless as steel
The hard flat surface of the circling sea—
The more life mocks at me the more I dare."

ORTHOPEDIC USES OF THE LOOM

By Loring T. Swaim, M.D., Boston, Mass.

A recent experiment in occupational therapy has been tried with two cases of infantile paralysis, the object being to develop weak quadriceps femoris and the extensor muscles of the foot. The first case was a girl of about 22, who had had complete paralysis of both legs. Gradually the muscles had regained their power, leaving a toe drop and weak quadriceps femoris, so that the foot could not be raised more than once and with very little movement. The legs could not be straightened voluntarily. Since there was some power, it was decided to develop more, if possible, by use of a light loom requiring the use of pedals for the warp shifts. This would necessitate the raising of the foot and the extension of the lower leg at intervals regularly during weaving, and instead of making the exercise a task, would make it a pleasure which would be persisted in longer with less fatigue.

This treatment gave satisfactory results. At first the legs had to be lifted on to the treadles with the hands. After four or five weeks the left leg could just accomplish the lift without aid. In ten to twelve weeks both legs could work unaided. Of course the element of fatigue had to be considered, as the muscles in infantile cases tire easily. The improvement slowly increased. Not only was there more power, but the length of time at work was extended. This case improved so satisfactorily that the experiment was tried again.

This second patient had also regained the use of all her muscles except the quadriceps on the right leg. The left was weak, but could contract once or twice before fatiguing. The patient has already made some progress and has been able to add to the work of the loom the use of an automobile pedal in her car. The power in both quadriceps is slowly developing.

From our experience with the loom in these two cases, it has seemed that many more muscle development uses could be made of it, such as coördinating movements for lateral sclerosis and tabetic patients where accurate muscle control is the object, and in post-operative muscle training cases where normal use of an arm or leg is desired. Another group where regular use of arms and legs is necessary is that of the arthritic during the process of limbering stiff joints. The loom seems to be an extremely useful bit of reconstructive apparatus for orthopedic cases. We have used it in bursitis of the shoulders, atrophy of the interossei of the hand, infantile paralysis, progressive muscular atrophy, lateral sclerosis, post-operative arthroplastics of the hip, post-operative semilunar cartilage operation of the knee, and arthritis.

The loom, because of the many movements required, is ideal for complete exercise of all joints of the body in a normal and accurate way. The hands are used to grasp the shuttle, the arms are extended and withdrawn, the elbows are straightened and flexed, the body has a forward and backward swing, the legs are raised and lowered, the knees move, as well as the ankles, and even the toes play their part. Again, the use of the loom for short periods is far less fatiguing than the routine of exercises repeated at intervals, partly because it is more interesting and partly because the results are noticeable in actual accomplishment. Most orthopedic cases become discouraged by the length of time required for improvement.

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Since the gain can come only through effort, this effort must be as intriguing as possible.

Orthopedic occupational work reminds the writer constantly of the beautiful Cecropia moths he used to raise. When the time came for the pupa to leave the cocoon, it made a small hole. It never made a hole large enough, it seemed, for it would struggle for a day, and finally emerged a fully developed perfect moth, with wings strong enough to use. Once in pity the opening was enlarged and the struggle decreased, but to the watcher's great interest and sorrow, the moth came out easily, but with puny wings and entirely unfit for life. It died shortly because it was not developed. Struggle is apparently necessary to full physical capacity, but there should be some interest in the struggle, as far as the chronic orthopedic case is concerned.

Occupational therapists are too often interested in the salable value of the product or the intrinsic beauty of the design. One should also consider carefully the exact effect of each movement of the work, its fatigue possibilities, its muscle-building effects, and its strain potentials. These should never be lost sight of in dealing with the invalid.

TRAINING OCCUPATIONAL THERAPISTS

The training of the future occupational therapist is a most vital problem in occupational therapy today. The work cannot continue its development without competent persons to carry it on. There are already some 300 institutions providing occupational therapy; these may be looked upon, in a measure, as pioneers in the field. They need, however, to strengthen their departments, increase their personnel, and, in order to continue to lead the way, must improve the quality of their work. Occupational therapy is still in its infancy, and there is waiting a rich field of research in the study of the mental and manual processes in each occupation with special reference to various pathological conditions. The extension of occupational therapy and the improvement of present methods and research demand trained workers.

Like all pioneers many of the older occupational therapists may proudly boast of being "self-made." They have observed and learned when and where they could. The younger therapists are largely graduates of the schools which grew up to meet the demand for war aides. It is the history of every profession that as time goes on and standards and requirements become more rigid, graduation from an approved school becomes increasingly essential. A number of schools already exist which give splendid training courses. They are:

Boston School of Occupational Therapy, Boston, Mass.
Milwaukee-Downer College, Milwaukee, Wis.
Philadelphia School of Occupational Therapy, Philadelphia, Pa.
Teachers' College, Columbia University, New York, N. Y.

In addition to these regular schools of occupational therapy are other institutions which include in their curricula courses in the subject. Among them are:

School of Occupational Therapy, Berkeley, Cal.
School of Diversional Occupation, Colorado Springs, Colo.
Maryland Institute of Art and Design, Baltimore, Md.
Sheppard & Enoch Pratt Hospitals, Towson, Md.
Studios of Elizabeth Winn, Katherine Brady and Lucy Giplin, Baltimore, Md.
School of Applied Arts, Tide-Over League, Boston, Mass.
Devereux Mansion, Marblehead, Mass.
Susan Tracy, Jamaica Plain, Mass.
Detroit Board of Education, Detroit, Mich.
Kalamazoo State Hospital, Kalamazoo, Mich.
Occupational Therapy School, Fondren, Miss.
Montefiore Hospital, New York, N. Y.
Mechanics Institute, Rochester, N. Y.
University Hospital, Iowa City, Ia.

The National Home for Disabled Volunteer Soldiers, while not possessing any definite training facilities now, has plans to establish training courses, first at the Central Branch, Dayton, and later at other institutions over the country.

A large number of institutions are giving training to nurses and attendants, and some well-trained therapists come from them. A large part of the personnel of institutions giving occupational therapy on a large scale is trained in this way. The May number will be devoted to this phase of the training of aides.

PROJECT IS FAILURE

The editors of the Department of Occupational Therapy and Rehabilitation regret to announce that since the publication of the article entitled "A Post-Hospital Community for the Handicapped," in the November, 1922, issue, information has come to them that the project has failed. Although the article was published in good faith, it can no longer be regarded as authentic, or as a successful experiment.

"The child's mind, we think, and in fact know, is like that of the lower animals; or if higher than the animal mind, it is not so high as that of the simplest savage. He cannot concentrate his thought; he cannot think at all; his consciousness is in its dawn; he revels in colors, odors, is thrilled by touch and taste and sound, and is like a well-nourished pup or kitten at play on a green surf in the sunshine."—W. H. Hudson.

Peter Rabbit and Cat sets made at the Curative Workshop at Columbia Hospital, Milwaukee. The former was designed by Mrs. Carl Henry Davis and the latter by Miss Caroline G. Upham.

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THE ROLL CALL

Headquarters, New York

The secretary-treasurer of the American Occupational Therapy Association acknowledges with thanks the receipt of a check for $25 from the Illinois Society of Occupational Therapists; the proceeds of which are to be applied to the general work of the national association.

Pennsylvania

Mrs. Emily Gaffney three months ago took charge of the occupational therapy department being developed at the Harrisburg State Hospital. The department at present averages about 125 patients working daily on the female wards. This group includes thirty from the better type wards, fifty of the lower grade habit training and dementia praecox and fifty from the disturbed wards.

A new occupational therapy department was opened at the County Hospital at Retreat the first of the year. The work there is receiving excellent support from the medical staff and board of trustees. Mrs. Alice Messinger has charge of the department. Mrs. Messinger was graduated from the Boston School of Occupational Therapy with the 1922 class.

A most interesting meeting on music in institutions and on occupational therapy was held at the State Homeopathic Hospital in Allentown on January 29. Mr. Willem van de Wall of the Russell Sage Foundation committee on music read a paper and demonstrated his theories of psychological approach through music with a group of untrained patients. Mrs. Eleanor Clarke Slagle spoke on occupational therapy in state hospitals and Mr. T. B. Kidner on the rehabilitation problem. Five hundred persons attended the meeting.

The State Bureau of Mental Health, Department of Public Welfare, is constantly in touch with openings for the position of occupational therapist, particularly in the hospitals for mental cases. Application blanks will be sent to any trained therapists who may wish to consider positions in Pennsylvania. Applicants must apply to Miss Mary L. Putman, 112 Market Street, Harrisburg.

Wisconsin

Milwaukee-Downer College is the recipient of a $250 prize to be given each year to a student training in occupational therapy who will specialize in mental work by taking her period of three months practising teaching at the Milwaukee Sanitarium. The prize is given by Mrs. John Hardin of Chicago in memory of her sister, Elizabeth Curtis Burnet.

Miss Laurella M. Hollister, until recently in charge of occupational therapy at Michael Reese Hospital, Chicago, has gone to Milwaukee to be director of the occupational therapy at Mount Sinai Hospital.

TO MAKE STATE HOSPITALS OF NEW YORK FIREPROOF

State Architect Sullivan W. Jones of Yonkers, recently appointed by Governor Smith, has started work on plans for making the various New York state hospitals fireproof, including the reconstruction of the ward building of Manhattan Hospital on Ward's Island, which was recently burned with a loss of over a score of lives.

"We are to rebuild the old walls with fireproof arches," said Mr. Jones. "The building will be fireproof throughout. We have $250,000 available for the work, and we expect to start on the building immediately."

PENNSYLVANIA ASSOCIATION ANNOUNCES ANNUAL PROGRAM

The Hospital Association of Pennsylvania will hold its annual convention at the Hotel Adelphia in Philadelphia on April 26-27. The following program has been arranged:

Thursday Morning, April 26

Registration of delegates.
Inspection of exhibits.
Renewal of old acquaintanceships and making of new.
Invocation, Thomas James Garland, Bishop-Suffragan, Protestant Episcopal Church.
The city's welcome to the association, the Hon. J. Hampton Moore, mayor of Philadelphia.
Inspection of exhibits.

Thursday Afternoon

Address, "The Hospital's Relationship to the Community," Michael M. Davis, Jr., Ph.D., chief of service bureau on community relations of hospitals, American Hospital Association.
Discussion, Sherman C. Kingsley, executive secretary, Welfare Federation, Philadelphia; and Harold L. Foss, M.D., surgeon in chief, Geisinger Memorial Hospital, Danville.
Address, "Feeding the Hospital Population," Henry L. Klopp, M.D., superintendent, Homeopathic State Hospital for the Insane, Allentown.
Discussion, B. Franklin Stahl, M.D., lecturer on dietetics, University of Pennsylvania medical school; Miss Helen E. Gilson, chief dietitian, Philadelphia General Hospital; and Miss Claribel McCrae, chief dietitian, Philadelphia General Hospital.
Address, "How Shall the Hospital Properly Care for its Patients and at the Same Time Educate the Nurse?" Miss M. Adelaide Nutting, department of nursing and health, Teachers' College, Columbia University.
Discussion, A. E. Blackburn, M.D., president, Pennsylvania State Board of Nurse Examiners; Arthur Fleisher, president, board of trustees, Jewish Hospital, Philadelphia; Miss Edith E. Yingst, superintendent, Carlisle Hospital and Training School, Carlisle.

Thursday Evening

Dinner at 7 p. m.
Speakers: Floyd W. Tomkins, S.T.D., rector, Holy Trinity church, Philadelphia; E. J. Cattell, D.Sc., field secretary, Chamber of Commerce convention bureau, Philadelphia; the Hon. William Potter, president, board of trustees, Jefferson Medical College and Hospital, Philadelphia; A. R. Warner, M.D., secretary, American Hospital Association, Chicago.

Friday Morning, April 27

Round table on nursing problems.
Leader: Miss Margaret Dunlop, superintendent of nurses, Pennsylvania Hospital.
Round table on general hospital problems.
Leader: Frank E. Brooke, superintendent, Harrisburg Hospital, Harrisburg.

Friday Afternoon

Business meeting.
Election of officers.
Reports of committees.
Address, Charles H. Miner, M.D., commissioner of health, Harrisburg.
Address, Ellen C. Potter, M.D., commissioner of welfare, Harrisburg.

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MEETINGS, CONVENTIONS AND CONFERENCES

AMERICAN CONFERENCE ON HOSPITAL SERVICE PRESENTS ANNUAL PROGRAM

A STRONG program and a large attendance marked the session of the American Conference on Hospital Service which formed a noteworthy part of the annual Congress on Medical Education, Medical Licensure, Public Health and Hospitals held in the Congress Hotel, Chicago, March 5-7. More than 150 representatives of hospital administrative and medical staffs were present.

Three subjects took up the attention of the body and formed the basis of the three main addresses and their subsequent discussions: non-medical clinical assistants, the legal liability of hospitals, and the relation of the state university hospital to the medical profession. These topics, along with the introductory remarks of President Frank Billings, M.D., and the report of the Hospital Library and Service Bureau by Miss Donelda R. Hamlin, consumed the time allotted to the section on hospital service.

Chief attention went to the consideration of "The Role of Non-Medical Clinical Assistants in Hospitals without Interns" with its attendant problem of intern shortage, as it was discussed first in a paper by Dr. S. S. Goldwater, by formal remarks by Drs. Charles P. Emerson and N. P. Colwell and finally from the floor.

Non-Medical Aid Is Essential

Quoting figures to prove that 50 per cent of all hospital beds in the country are unsupplied with interns, Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, in his address declared that hospital progress is dependent upon non-medical aid. It is essential, however, in his opinion that an adequate course of training for non-medical clinical assistants be worked out by a competent committee and such instruction be given in conjunction with schools of nursing.

"In twelve or eighteen months," said Dr. Goldwater, "an intelligent nurse can be taught, with the exception of diagnosis and treatment, all the duties of an intern unless it be the more elaborate bedside procedure. Such technical assistants can be trained as anesthetists, surgical assistants, laboratory technicians and record keepers. Numbers of individuals already are being employed for such technical aid in our smaller institutions, but the medical profession has neglected to give proper thought to their training."

The need for the non-medical clinical assistant, Dr. Goldwater brought out, has arisen from two sources: (1) many hospitals are unable to secure interns; and (2) many hospitals have deemed it wise to relieve their interns of superficial duties.

Little relief is seen by Dr. Goldwater in overcoming the intern shortage which became acute during the war. The practice of paying them for their services succeeds in doing nothing more than bringing about a fruitless shifting. As the enrollment of medical schools increases, so does the need of interns grow in the institutions where they already are employed. The consolidation of petty hospitals would not be a satisfactory solution of the problem, for it is not likely to take place in sufficient numbers to improve the situation.

"If the larger hospitals which employ interns entirely could be persuaded to employ a mixed personnel of non-medical technicians and interns, the situation might be relieved," said Dr. Goldwater, "but where is the silver tongue that could so persuade them?"

Thinks County Hospital a Menace

Dr. C. P. Emerson, of Indianapolis, president of the Association of American Medical Colleges, in leading off the discussion of Dr. Goldwater's paper spoke of why it is difficult for small hospitals to get interns. He presented a chart which showed the astounding predominance of the small hospital construction in the last two decades; this, he believes, is unfortunate.

"The more you try to discourage small hospitals," said Dr. Emerson, "the more they will grow. To argue against them but stimulates local pride and calls for new construction. The county hospital, in my opinion, is a menace—but an inevitable menace. It cannot organize efficiently since it is a public institution. The unsupervised intern in a small hospital would develop careless habits which would be detrimental to him throughout his practice, provided he is responsible to the hospital and not to the doctor. Even if the intern could be sent to this type of hospital, it probably would be good neither for the hospital or for the patient."

As a solution to this problem, Dr. Emerson thinks the public should be educated not to allow all doctors in the community to practice in the hospital. One or two medical men should be selected who can be held responsible for the treatment of all patients in this institution.

First Intern Year in Small Hospital

Dr. Colwell, secretary of the Council of Medical Education and Hospitals of the American Medical Association, thought some relief might come if the larger hospitals would take only those interns who had intern training in some general hospital. Such interns could be assigned then

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Salaries for interns, Dr. Colwell brought out, have not proved attractive, as the intern is interested in the institution that can teach him most. Temporary relief for the larger hospitals is seen in the increase in the number of medical graduates within the next few years.

In the general discussion which followed, Dr. F. E. Sampson of Iowa declared that the small hospital is here and must be dealt with. The task which lies ahead, as he sees it, is to develop medical education so that the small institutions which need interns can get them.

"You might have interns take a year at a large hospital and then make them go out to the small place where they are needed and stay for six months. Instead of this, the intern now goes into the specialty which is already overcrowded."

The Rev. Fr. P. J. Mahan, dean of Loyola University, Chicago, pointed out the crying need in small hospitals for persons properly trained to keep records. In answer to his question as to whether the demand for non-medical clinical assistants arose from hospital idealists or from the small hospitals themselves, Dr. Goldwater declared it comes from both.

Finds Non-Medical Aid Successful

The success which attends Pennsylvania's use of non-medical clinical assistants was told by Dr. J. D. Metzger, president of the bureau of medical education and licensure of that state. Such technicians have been placed in all small hospitals under the direction of a pathologist. As for non-medical anesthetists, he declared, they had been found superior to interns. For record keeping in Pennsylvania, a non-medical assistant must be employed. In small hospitals Dr. Metzger believes that a resident physician should be in charge of all non-medical assistants.

"The Liability of the Hospital for the Acts of its Servants" was the title of a well defined paper by Mr. John A. Lapp, director of the department of social action, National Catholic Welfare Council.

Urges Inspection of Charter

"The hospital will do well to look to its charter," advised Mr. Lapp. "For the public hospital in case of tort there is slight liability; for the private hospital conducted for profit exemptions are few; and for the private benevolent or charitable institution there is a limited amount of liability.

"The crucial question is whether a private hospital is incorporated for profit or for charitable purposes. Hospitals have been conducted as perfect examples of charitable institutions, without apparently knowing that their charter called for capital stock and had other indications of a business corporation. That such stock was never issued and that the work done was the purest of charities, did not prevail against the provisions of the charter.

"In the case of hospitals connected with medical schools, the whole question is one of the character of the parent institution—the medical school. If the medical school is organized for profit, has any of the earmarks of a business corporation, the hospital which it conducts as an adjunct to its training is not a charitable institution, whether it gives its work to charity or not."

Industrial hospitals, Mr. Lapp pointed out, are strangely construed as charitable institutions. This line of decisions go as far as to include among charitable institutions those where a regular monthly contribution is made by the men to provide for their medical and hospital attention.

Profit-making institutions are liable for the malpractice of physicians employed by them for all of the reasons that a physician might be liable for malpractice in his own private practice, plus all liabilities of a business enterprise. When the physician is not employed by the hospital, the patient must seek redress against the physician himself.

Must Select Employes with Care

As to charitable institutions, the recent Ohio ruling requires that hospitals select their employes and assistants with due care; if they are not so selected the hospital becomes liable. How far this doctrine will require hospitals to make physical examinations of their employes is not certain, but it is a reasonable requirement that they should make such examinations or be liable for the consequence.

"As to physicians," said Mr. Lapp, "the hospital has a right to assume that a license to practice medicine, given by the state, is sufficient to warrant employment, and in the absence of any knowledge to the serious detriment of such physician, the hospital ought not to be held liable. If the physicians on a closed staff are selected by or with the approval of the trustees, the hospital should be held liable. In the case of private patients brought to the hospital by a member of the staff, the liability should rest with the patient himself."

Dr. A. R. Warner, executive secretary of the American Hospital Association, in discussing the paper, lamented the paucity of satisfactory literature on the subject of hospital liability. The hospital must realize, he declared, that the courts are back of the public, and that the only safe course to pursue is to use due and reasonable care in the selection of all agents, including physicians.

In his paper on "The Relation of the State University Hospital to the Medical Profession," Dr. C. P. Howard, professor of medicine at the University of Iowa, told of the past year's work at that institution as it is related to the medical profession of the state.

Teach Doctors to Train Own Aides

When the doctors of the state expressed irritation because the university refused to train technicians for them, the medical college instituted a summer postgraduate course in laboratory technique and asked the doctors themselves to enroll so that they might teach their own assistants later and be able to interpret the findings correctly.

The University of Iowa also conducts an annual clinic each winter to which the doctors of the state are invited. It occupies two days and consists of special clinics and demonstrations, a smoker where faculty, undergraduate medical students and practitioners meet informally, and addresses by important men in the field of medicine.

The medical staff of the institution attempts to answer all requests from county medical societies for speakers whenever such engagements do not interfere with teaching work. The clinical staff of the hospital goes out into neighboring towns for consultation work when possible, and often, on the outside, sees private patients referred to its members by physicians.

Dr. Howard described the work of the Iowa laws which provide free treatment for both children and adult cripples who are indigent.

A glimpse of some of the contacts with the profession which are made at Stanford University Hospital in San Francisco was given by President Ray Lyman Wilbur of that institution in a brief discussion of the question.

The conference session closed with the annual report of the Hospital Library and Service Bureau presented by Miss Donelda R. Hamlin. In the first two years of its

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existence this bureau has received inquiries from hospital and public health workers in every state in the Union, nine provinces in Canada and eighteen foreign countries. Package libraries have been loaned to 1293 persons, and nearly 6,000 biographies have been distributed.

Act on Non-Medical Aids

At a business session held at the Hospital Library and Service Bureau on the evening preceding the program, action was taken on the subject of non-medical clinical aids and officers were elected. The following resolution adopted by the trustees at the meeting at Atlantic City last September was approved by the organization:

"Resolved that the conference undertake through an appropriate committee the following work:

(a) A quantitative and qualitative study of the minor clinical procedures incidental to the diagnosis and treatment of the sick in hospitals.

(b) An investigation (preferably with the aid of the Council on Medical Education of the American Medical Association and such other bodies as may be willing and able to assist) of the relation of the minor clinical procedures indicated above to the training of interns; and of the extent to which interns possessing medical degrees or who are candidates for such degrees, are now or are likely in the future to be available for the work.

(c) To outline a plan for the training of non-medical aids in history taking, clinical recording, first aid, surgical dressings, technique of the operating room, administration of anesthetics, laboratory technique, and other service of like grade, incidental to diagnosis and treatment (diagnosis and treatment per se being excluded), also to determine the preliminary educational qualifications of candidates for the suggested courses.

(d) To inquire into the resources of existing educational or medical institutions for carrying out this training, and to indicate the type or organization or organizations which are best fitted to undertake it.

(e) To suggest a program for the utilization of the services of persons trained in the procedures above referred to, in hospitals with and without interns."

Dr. Billings Again President

The following officers were elected: President, Dr. Frank Billings; first vice president, Dr. A. R. Warner; second vice president, Dr. Linsly R. Williams; treasurer, Dr. Harry E. Mock.

On the board of trustees the following were named: for the term expiring Sept., 1924, the Rev. Charles B. Moulinier, S. J., Miss Minnie Ahrens and Dr. Winford H. Smith; for the term expiring in 1925, Dr. A. C. Bachmeyer, John G. Bowman and John M. Dodson; for the term expiring in 1926, Miss Sara B. Place, Dr. Fred C. Zapffe and Dr. Frederick C. Smith.

METHODIST HOSPITALS AND HOMES ASSOCIATION HOLDS ANNUAL CONFERENCE

Between sixty-five and seventy representatives of Methodist institutions for the sick, young and aged gathered in Chicago on February 14 and 15 at the annual conference of the Methodist Hospital and Homes Association. Sessions were held at the Methodist Book Concern auditorium.

Zero weather and snowstorms delayed trains and at the opening session, none of the scheduled speakers was present. Undaunted by the disrupted program, the president, Mr. E. S. Gilmore of Wesley Memorial Hospital, Chicago, carried through an impromptu program that proved both beneficial and entertaining to the delegates.

For the first time at this annual convention certain sessions were broken up into group meetings, where hospital superintendents, heads of institutions for aged and directors of children's homes might meet to discuss their respective problems. The section meetings were purely experimental in nature, but proved so profitable that they probably will become an important part of the annual program.

Dr. Woods is New President

Officers for the association for the coming year are: President, Dr. C. S. Woods, St. Luke's Hospital, Cleveland; first vice president, S. W. Robinson, Methodist Home for Children, Buffalo; second vice president, J. A. Diekmann, Bethesda Hospital, Cincinnati; third vice president, Miss Blanche M. Fuller, Nebraska Methodist Hospital, Omaha; fourth vice president, the Rev. W. H. Underwood, Crowell Memorial Home, Blair, Neb.; treasurer, Mrs. W. A. Phillips, Methodist Home for the Aged, Chicago; and secretary, W. H. Jordan, Asbury Hospital, Minneapolis.

Mr. S. L. Riley of Wichita, Kan. was drafted to give the address on "How to Finance Your Institution," the topic assigned to Mr. Robinson of Buffalo, whose arrival was delayed. Mr. Riley urged upon the hospitals a careful study of their various departments with a view to cutting out surplus employes. In his own institution, Wesley Hospital, Mr. Riley declared an oil system of heating had been installed which has cut the winter fuel bill in half. The Community Chest in Wichita has been of tremendous assistance of the hospital in its charity work.

In raising funds for building purposes, the burden must be carried by the local constituency, declared Mr. Riley. Support cannot be expected throughout the conference unless the local community leads off with a large gift. It is vital in conducting a conference campaign that there be both unity of action and a clear field. A conference campaign for hospital funds should not be linked up with a drive for other interests, for the hospital need will be obscured.

Improvements Pay for Themselves

How the Methodist Hospital at Des Moines has been remodelled without funds or without any campaign for funds was told in an interesting manner by C. S. Walker, trustee. The entire institution is being remodelled a floor at a time; money is borrowed for the improvement and the increased use of the hospital which results soon pays for the improvement. The maternity floor paid for itself within a year. Out of the excess earnings of the surgical section, improvements on the operating floor have been paid for. A new laboratory has paid for itself by doing commercial work for physicians throughout the state of Iowa and its earnings will pay for the rejuvenation of the service floor.

Superintendent G. T. Notson of the Methodist Hospital, Sioux City, Ia., presided at the round table discussion of the hospital group held in the afternoon of the opening day.

Miss Alice Thatcher, superintendent of Christ Hospital, Cincinnati, told of the system of handling medical records at that institution. The hospital has a record committee composed of staff men whose duty it is to look over all charts and see that they are correct before they are filed. Before the monthly staff meetings each mem-

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The Silver Service for the new

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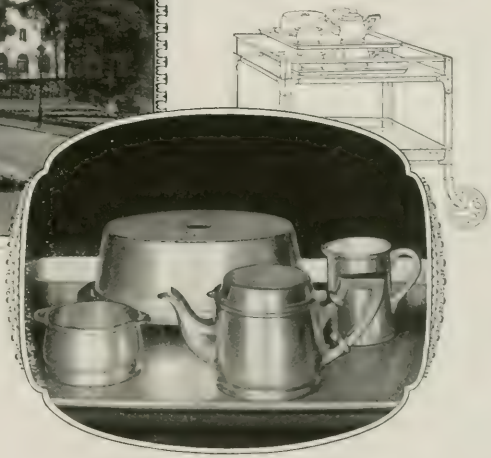

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ber of the committee goes over his allotted portion of the records.

In a discussion of how to secure an adequate number of interns, Mr. E. S. Gilmore of Wesley Memorial Hospital, Chicago, declared that the problem would be solved if students were required to serve two years as interns. As it is now, the best way for an institution to get interns is to obtain communication with the registrars of various medical schools telling what that hospital can offer in the way of training and experience. There usually are medical graduates who wish to locate in the vicinity who will be glad of the opportunity to make an acquaintanceship with the community.

"If you want interns," Mr. Gilmore advised," treat them well and give them the consideration due a physician. Do not make orderlies out of them. If you can furnish them with the education they are seeking, you will not have much trouble in getting them."

Dr. C. S. Woods is of the opinion that, if the smaller hospitals are to get interns, they must pay them a nominal sum. If, however, the competitive paying of interns were universal, the large institutions with ample funds could command the services of all. He believes that hospitals should get together to determine some uniform basis for paying interns.

Long discussion was given to the problem of providing free service to ministers and their families and to doctors. A committee was appointed to study the question and to make some recommendation for a uniform ruling in the matter which would apply throughout the hospitals of Methodism.

Testimony in behalf of hospital standardization was given by Mr. C. C. Durin of the Iowa Methodist Hospital, Des Moines. The staff of that institution has grown by leaps and bounds, he declared, since the hospital has fulfilled the standards of the American College of Surgeons.

The importance of the school for nurses in the hospital program was touched upon in the discussion of Miss Blanche M. Fuller of Nebraska Methodist Hospital.

On Wednesday evening the delegates were shown moving picture films of hospitals and homes by Mr. J. E. Lacount, field secretary of the board of hospitals and homes, Chicago.

Dr. N. E. Davis, corresponding secretary of the board, presented at the Thursday session a preliminary report of a survey of Methodist hospitals and homes in the United States, Alaska, and Honolulu. This report has not yet been released for publication.

ILLINOIS ASSOCIATION CONVENES

The Illinois Hospital Association held its first annual meeting since 1921 on March 2 at the Hotel Sherman in Chicago. Some twenty delegates from Chicago and downstate hospitals were in attendance at the morning business session, luncheon and round table.

The convention voted to amalgamate with the Downstate Hospital Association of Illinois, provided that association is willing to accept the Illinois association's basis of membership, which is the institution. Committees from both associations have been appointed to meet and perfect the merger.

Opposition to a number of bills to be presented before the state legislature was expressed by the association; among them the proposed eight-hour law or nine-hour law for women, which would affect nurses, the bill placing hospitals under the state department of public welfare for purposes of inspection; and proposed legislation restricting physicians in prescribing narcotics.

Reasons for protesting against the women's eight hour bill were given as follows: "(1) general protest against limitation of working hours by law; (2) most hospital employes work less than ten hours and few more than eight; (3) health of hospital employes not affected adversely by reason of prolonged working hours; (4) health of hospital employes and nurses universally good, for under constant close supervision minor ailments and complaints receive early and competent attention; (5) work of female hospital employes is not arduous, and health is in no way affected thereby; (6) hospitals must operate and be prepared to care for the sick twenty-four hours a day and seven days a week; (7) most hospitals, particularly those in rural communities and the smaller cities, have difficulty in obtaining and housing sufficient nurses and other employes to care for the sick properly under the present ten-hour law."

Protest was made against the nine-hour day and fifty-six hour week bill on the same grounds and for the additional reason that no provision is made for the seventh day of the week without reducing the number of working hours during the other six days.

In opposing the anti-narcotic bill the following arguments were given: "(1) It provides no new constructive remedy for the illegal sale of narcotic drugs; (2) it imposes additional and unnecessary burdens upon those legally authorized to handle, dispense and prescribe narcotics, without any manifest benefit to any one; (3) it affords no protection to the individual for whom these drugs are prescribed legitimately; (4) it interferes with the practice of medicine in that it prevents the physician from prescribing whatever he may deem necessary in the manner he deems advisable; (5) the bill duplicates unnecessarily the federal requirements, is purely regulatory, contains no new provisions which can prevent unauthorized persons from obtaining, using or disposing of such drugs."

Concerning the bill which would regulate private hospitals and provide for their inspection and regulation, the association entered a general protest on the grounds that it "gives the state department of public welfare undue power in connection with the care of the sick in general hospitals and would authorize the board to enter any institution and interfere with the care and treatment of any class of patients therein." Such regulation, the association declared, is an impossible interference with the practice of medicine.

The sum of $1,000 was raised from among twelve of the institutions represented to provide the secretary with the services of a stenographer to assist in sending out bulletins, carrying on a membership campaign and attending to the general business of the organization. This amount is to be repaid from money subsequently received.

Dr. A. R. Warner, executive secretary of the American Hospital Association, was present at the session, and in answer to an invitation to speak, declared that he would watch the development of the association with much interest since its organization on the basis of institutional membership was in advance of the times and was fraught with many difficulties.

The following officers were elected: President, Dr. J. C. Stubbs, St. Anthony de Padua Hospital, Chicago; vice president, Dr. Clifford U. Collins, Peoria; secretary. Dr. E. T. Olsen, Englewood Hospital, Chicago. The board of directors is composed of the following members: Dr. M. L. Harris, Policlinic, Chicago; Dr. Emil Ries, Post Graduate Hospital, Chicago; Dr. Martin M. Ritter, Columbus Hospital, Chicago; Dr. J. H. Franklin, St. Margaret's Hospital, Spring Valley; George S. Hoff, Lake View Hospital, Danville.

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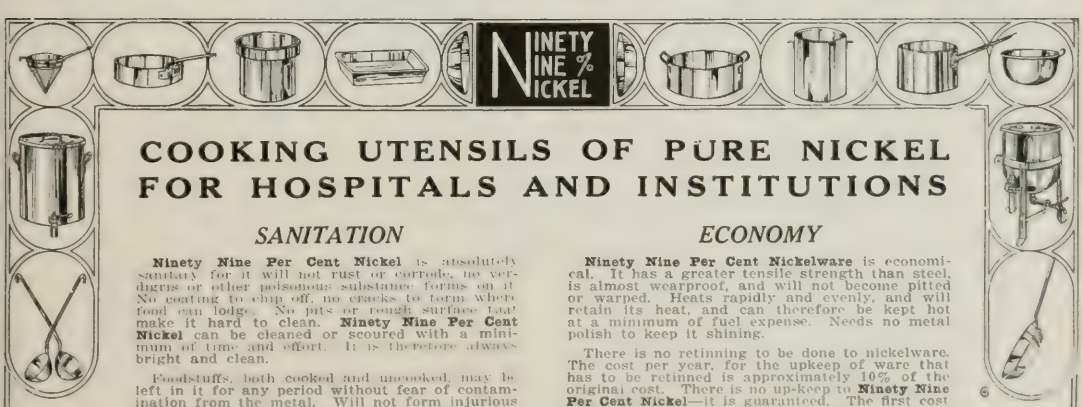

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Book Reviews and Current Hospital Literature

BURDETT'S HOSPITALS AND CHARITIES

The Yearbook of Philanthropy and the Hospital Annual. Founded by Sir Henry Burdett, K.C.B., K.C.V.O., Thirty-third Year.[1]

The yearbook of philanthropy and hospital annual of the British Empire, founded thirty-three years ago by the late Sir Henry Burdett, has appeared in its 1922-23 form, and with its usual comprehensiveness furnishes a directory of British and colonial hospitals, asylums, medical schools and colleges, nursing and convalescent institutions, tuberculosis sanatoriums, religious and benevolent institutions and dispensaries. In addition to this guide to hospitals and allied institutions, it contains a review of British hospitals for the year and an exhaustive record of charitable work.

The editors have made a commendable effort to exclude all obsolete information from the hospital directory, but the difficulty in getting hospitals to make any return even upon numerous requests for information is evidenced in the volume. All institutions from which no recent returns have been received are marked with asterisks, and the countless asterisks bespeak the indifference of hospital administrators in supplying the information which not only will put their institution on "the hospital map" but will be of value to others in the field.

Of chief interest from the American point of view is the list of hospitals in the United States, which takes up forty-one pages, and of Canadian institutions. In this volume, the province of Alberta is lifted from its former place of obscurity in the "Northwest Territory," where are grouped a few institutions of Yukon and Mackenzie, and is given the individual status it deserves. But no where has the reviewer been able to find mention of the hospitals of Saskatchewan. If this is due to their own negligence in reporting their existence and the salient facts concerning their organization, it is most regrettable; if their absence in this and past volumes can be traced to those who compiled the volume, numerous protests from Saskatchewan undoubtedly will follow.—M. W.

RADIUM THERAPY

By Frank Edward Simpson, A. B., M. D[2].

In a simple concise manner Simpson tells in this book the story of radium. Following a historic review he describes radium and radio-active materials from a physical, chemical and biological point of view. He dwells at length with the technique for preparing radium and radium emanation, and for measuring its strength.

The latter half of the book is devoted to therapy, each chapter dealing with a special field; for example, Radium in Gynecology, Radium in Dermatology, Radium in Ophtholmology, Otology and Rhinology, Radium in Internal Medicine, etc.

Simpson's work will be an excellent reference book for the general practitioner, or the specialist, to turn to for the broad underlying principles which govern radium therapy and for the more detailed descriptions governing technique.—R. B. B.

HISTORY OF AMERICAN RED CROSS NURSING

By Lavinia L. Dock, R.N., Former Secretary, International Council of Nurses; Sarah Elizabeth Pickett, B.A., Former Assistant to the Director, American Red Cross Nursing Service; Clara D. Noyes, R.N., Former General Superintendent of Training Schools, Bellevue and Allied Hospitals, New York City; Former President, National League of Nursing Education; Former President, American Nurses' Association; Director, American Red Cross Nursing Service; Fannie F. Clement, B.A., R.N., Former Superintendent, American Red Cross Town and Country Nursing Service; Elizabeth F. Fox, B.S., R.N., President of National Organization for Public Health Nursing; Director, American Red Cross Public Health Nursing Service; Anna R. Van Meter, B.A., M.S., Former Professor of Home Economics, Ohio State University; Former Assistant Director, American Red Cross Nutrition Service. Illustrated.[3]

The history of American Red Cross Nursing Service has been officially and completely recorded in a 1,500 page volume. Collaborating in the preparation of this comprehensive work are such nursing leaders as Lavinia L. Dock, Clara D. Noyes, Sarah Elizabeth Pickett, Fannie F. Clement, Elizabeth G. Fox, and the dietitian, Anna R. Van Meter, functioning as an editorial committee.

Half of the volume is given over to an account of Red Cross Nursing activities during the World War and constitutes a complete record of the achievements of the service in army cantonments and navy station hospitals in Great Britain, France, Belgium, Italy, the Balkans, Palestine, Poland, Prussia, Russia and Siberia. It is fitting in this connection that the frontispiece is a photograph of Miss Jane A. Delano, in a familiar and stately pose, who died in line of duty in April, 1919, at Savenay, France, after ten years of volunteer service and leadership with the American Red Cross Nursing Service.

Early chapters of the volume deal with the beginning and early struggles of the service in this country, chronicled by Miss Dock. Other divisions concern the public health nursing service, rural and urban, class instruction for women, and the dietitian.

The book is dedicated to American Red Cross nurses and has a foreward of appreciation of their magnificent contributions by President Harding.—M. W.

[1]The Scientific Press, Ltd., London, 1922-23.
[2]C. V. Mosby Company, St. Louis, 1922.
[3]The Macmillan Company, New York, 1922.

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XX — *May 1923* — No. 5

800 YEARS OF SERVICE AT ST. BARTHOLOMEW'S

By RODEN H. P. ORDE, London, England.

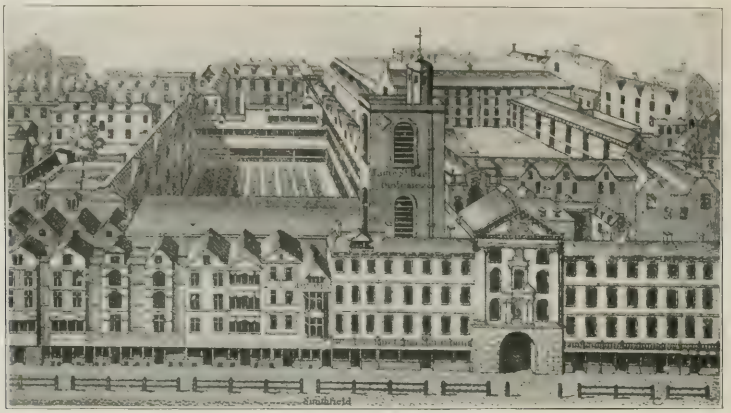
IN THE year 1123 Rahere founded in fulfillment of a vow and in obedience to the command of St. Bartholomew, conveyed to him in a vision, a hospital and a monastery at Smithfield. Rahere was a man of humble birth who had by certain ingratiating talents risen to a position of some influence at the Royal Court. Stricken by illness while on a pilgrimage to Rome, he vowed that should he be spared to return home he would build a hospital in token of his gratitude. His prayer was heard and he was told by St. Bartholomew, who appeared to him in a vision, to build at Smithfield a church that should bear his name. Rahere on his return to England secured the aid of the king and of the church—for he was a cleric as well as a courtier—and on the chosen site carried out the command of the saint.

The vows of the penitent are many; few have found a nobler fulfillment. For 800 years, with one brief interruption in the reign of King Henry VIII, a devoted band of men and women have carried on their work of mercy in Rahere's hospital.

The Little Britain Gateway to St. Bartholomew's Hospital, London.

The story of the foundation takes us back to

the days of the Norman Conquest. Men were then living who remembered Hastings. For anything we know to the contrary, among the first patients may have been one who fought at the



Engraving of the hospital in 1720, showing the Gateway as it stands today. In this engraving can be seen the butchers' stalls on either side of the gateway. Soon after the engraving was made the hospital was rebuilt from the foundations, 1725 to 1760.

battle. However that may be, many maimed in war, in revolution, in riots and by fire, must in the length of years have blessed the good saint, for Smithfield has a somber history. Today the casual visitor will find some difficultiy in conjuring up scenes from the past. None of the original building remains; that has long since disappeared. St. Bartholomew's hospital has no very striking façade. It does not proclaim itself to the world as does St. Thomas' on its unrivalled river site; the merits of St. Bartholomew's lie deeper than in mere external beauty.

The three large blocks that look on to Giltspur Street are substantial and modern. The Smithfield front with its picturesque gate is overwhelmed by the massive end of the new pathological block; the third site that fronts Little Britain street is unimposing and is gradually being modernized, while the fourth is obscured by high buildings across the post office yard. The huge meat market that fronts the hospital on the other side of the Smithfield Square does little to stimulate the imagination; the almost equally huge post office that flanks it on the other side is dull and uninteresting. Even the mighty dome of St. Paul's Cathedral, distant but a few hundred yards, is seen only in glimpses between the high buildings. Yet Smithfield is full of memories. Of the striking down of Wat Tyler, the shameful death of Wallace, and the burning of the martyrs at the stake every child has read. A memorial tablet on the walls of the hospital tells that "within a few feet of this spot, John Rogers, John Bradshaw, John Philpot and other servants of God suffered death by fire for the faith of Christ in the years 1555, 1556 and 1557." The great fire of London raged round but spared the hospital. The Gordon riots centered at the prison which was but a stone's throw away, and, as if Smithfield is ever to witness deeds of violence, one of the gates of the hospital is deeply dented

Font in the Church of St. Bartholomew the Great. The painter Hogarth was baptised in this font.

by bombs dropped during one of the air raids over London during the Great War. It is not difficult to picture the awe-struck patients eagerly asking those who waited upon them 'the latest details' of these happenings. Strange juxtaposition of mercy and fiendish cruelty!

Tomb of Founder in Sanctuary

One old building, however, there is and it is well worth a visit by those who seek to gain some impression of the antiquity of St. Bartholomew's. Separated only by a narrow street from the eastern corner of the hospital stands the entrance gate to the remains of the monastic church of St. Bartholomew the Great, which Rahere built. His body lies buried beneath his effigy in a tomb standing in the sanctuary. Sadly mutilated by time and the destroying hand of man, as the church is, it is still possible as one stands in the choir between the massive Norman pillars looking towards the tomb of the founder, to see something as it appeared nearly 800 years ago.

For more than 400 years the hospital and the monastery were associated. At the Reformation in 1536 the hospital revenues passed into the possession of King Henry VIII, but a few years later on the petition of Sir Richard Gresham, lord mayor of London, the king refounded the hospital and eventually restored a large portion of its endowments. From that day onwards there has been no cessation of the work.

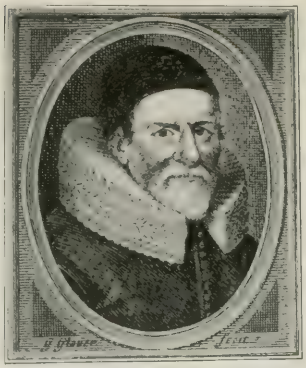
It is recorded that in 1662 students were in the habit of attending the medical and surgical practice of the hospital, and in 1667 a library for the use of the governors and young university scholars was formed. The medical school, therefore, officially dates from 1662, though no doubt students attended the hospital prior to that year. We give an order of date the various additions that have since been made.

Choir of the Church of St. Bartholomew the Great, showing the tomb of the founder protected by sandbags against damage by air raid bombs during the Great War.

Tomb of the Founder, Rahere

1726. Anatomical museum built.
1822. New anatomical theater built.
1835 to 1854. Anatomical museum enlarged; new medical and chemical theaters and museum of materia medica and botany built; library enlarged.
1865. New dissecting room built.

1866. New laboratories for the study of practical chemistry.
1870. Laboratory for the teaching of natural philosophy built. New eye wards built.
1876. The existing accommodation being insufficient for the students, the old buildings were placed on an enlarged area so as to more than double the accommodation.
1877. New anatomical theater fitted up and dissecting room enlarged.
1890. Laboratory for bacteriology built.
1891. New laboratories for public health and special pathology of preventable diseases, and for biology.
1899. Additions made to the appliances of the laboratories for physiology and physics.
1904. New laboratories for chemical pathology fitted up.
1905. New operation theaters built.
1907. New block costing £120,000 comprising new resident quarters, students' dining and common rooms, casualty and special departments, dispensary, casualty wards and clinical lecture theater.
1906. New lecture theater and laboratory for physics built.



John Woodall, surgeon to St. Bartholomew's in 1616. "If Woodall had done nothing else, he would deserve the lasting gratitude of every sailor, for he inferred the efficacy of lime juice from the happy accident of two ships' crews, one suffering with scurvy and the other free from it, differing in this one article of diet and nothing else."

Percivall Pott, surgeon to St. Bartholomew's, 1744-1787. Known throughout the surgical world on account of the careful description he gave of a fracture which he sustained in his own person.

Thomas Vicary, one of the most prominent men about St. Bartholomew's Hospital for many years after its second foundation. He seems to have acted as medical superintendent, though it is doubtful whether he ever practised as a surgeon.

mingled at St. Bartholomew's that it is difficult to carry away any very distinct impression of plan. The utilitarian architect would no doubt say that for modern hospital purposes it would have been better to make a clean sweep of the site and build afresh. The jealous guardianship of the governors has been mindful, however, of the past as well as of the present, and we may be sure that such portions, as the Church of St. Bartholomew the Less which stands just inside the Smithfield Gate (for the Hospital is still a parish), the staircase leading to the Great Hall, the walls of which are adorned with paintings by Hogarth, the Great Hall itself with its gallery of portraits of those who have rendered distinguished service to the hospital will not disappear before the hand of the reformer. Even the wards which do not conform to the latest standards of hospital planning, may well be spared a longer lease of life.

In spite of this composite character, however, St. Bartholomew's today stands "first among equals." In equipment, in the treatment of disease, in the teaching of medicine, in the nursing of the sick none can take rank before it.

At the time of the refounding by King Henry VIII there were 100 beds.

William Harvey, the discoverer of the circulation of the blood. He is said to have been "a man of low stature, round-faced with a complexion like a wain-scot."

1907. New chemical laboratories.
1909. Pathological block with large and extensive laboratories built.

Building, renovation and extension still continue and the hospital's history and that of the medical school is one of constant progress.

The old and the new are so inter-

John Abernethy, 1787. Surgeon to the Hospital for 28 years. One of the great reformers and teachers of the medical profession.

Today there are 686, as follows:

240 medical beds.
320 surgical beds.
16 maternity beds.
110 special beds.

686

In 1921 8,632 in-patients were treated. In the same year 67,913 out-patients were treated. The total income for 1921 amounted to £165,256, and the total expenditure was £184,145. The income of St. Bartholomew's for the year 1921 according to the statistical tables published by the King Edward's Hospital Fund for London, was made up of

Interest dividends, rents, etc.	£ 98,370
Voluntary gifts	37,047
Earnings	20,581
Extraordinary	9,258
	£165,256

For many years the amount of the endowments of the hospital made an appeal to the general public unnecessary. Today, however, the total expenditure is nearly double the endowments and large sums have to be raised in supplement.

Of the many distinguished men who have been associated with the hospital, space forbids mention of more than five. By the courtesy of Sir D'Arcy Power, K.B.E., M.B., F.R.C.S., we are able to give their portraits and the short legends that appear under them from an account of the hospital which he wrote and published in 1905.

It is sad that the historian of St. Bartholomew's — Sir Norman Moore Mt., M.D. — should not have been spared to take part in the anniversary celebrations. He died on November 30, 1922. His work is a worthy monument to himself and to the hospital, of the staff of which he was so distinguished a member.

From the *St. Bartholomew's Hospital Gazette* we learn the provisional program of the celebrations of the foundation.

ST. BARTHOLOMEW'S HOSPITAL
800th ANNIVERSARY CELEBRATIONS

PROVISIONAL PROGRAM

Tuesday, June 5, 1923

Service at the Priory Church of St. Bartholomew the Great.

Luncheon to the delegates by the governors and staff of the medical college of St. Bartholomew's Hospital.

Reception of addresses from the delegates by H. R. H. The Prince of Wales, president of the hospital.

Old students' dinner.

Wednesday, June 6, 1923

Reception at the Royal College of Surgeons of England, Lincoln's Inn Fields.

Bartholomew Fair to be held within the hospital precincts.

Banquet to the delegates.

Thursday, June 7, 1923

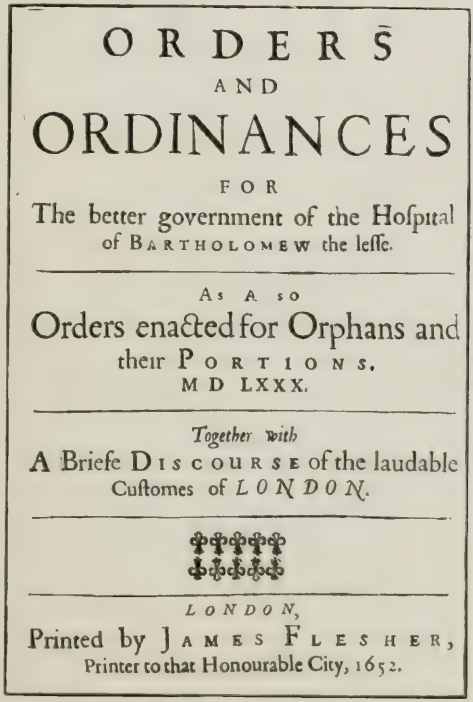
Service at St. Paul's Cathedral.

Continuation of Bartholomew Fair.

Conversazione in the hospital and medical college.

During the celebrations an exhibition of historical and scientific interest will be held within the hospital.

A meeting of the Rahere Masonic Lodge will be held during the celebrations.



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AS ALſO
Orders enacted for Orphans and
their PORTIONS.
MD LXXX.

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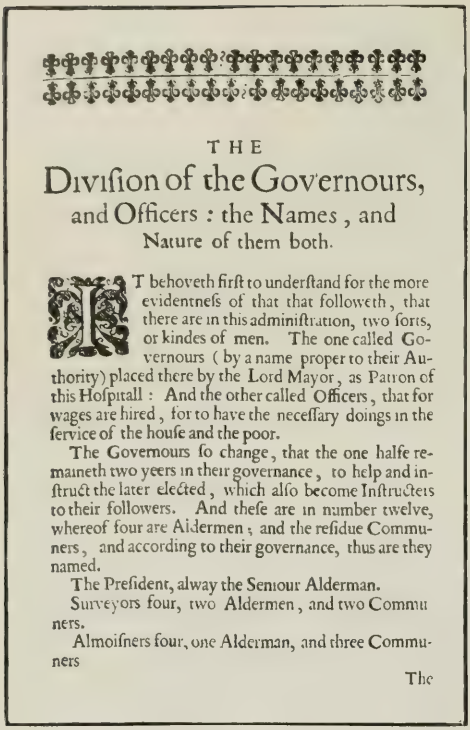
Printed by JAMES FLESHER,
Printer to that Honourable City, 1652.

The title page of an order book of St. Bartholomew's Hospital, printed in 1652. An original copy of the book forms a part of the collection of early hospital literature owned by Alfred C. Meyer, president of Michael Reese Hospital, Chicago.

That an institution with such a foundation and with such a record as St. Bartholomew's should ever be allowed to languish for lack of funds, or should ever pass into the hands of the state, except by some acts as violent and as soon regretted as that of the monarch whose effigy adorns the Smithfield Gate, is inconceivable. We trust that the celebration of the 800th anniversary of the foundation will mark a new era in the history of the mother of the great English voluntary hospitals; an era in which she renews her youth, and continues with fresh heart and confidence her career of usefulness. In her welfare is wrapped up that of all her children. She has shown that age does not necessarily mean decrepitude, and she has amply justified the faith of her founder. So far as his Hospital is concerned, time has proved that he built upon a rock against which the



THE
Diviſion of the Governours,
and Officers : the Names, and
Nature of them both.

IT behoveth firſt to underſtand for the more evidentneſs of that that followeth, that there are in this adminiſtration, two ſorts, or kindes of men. The one called Governours (by a name proper to their Authority) placed there by the Lord Mayor, as Patron of this Hoſpitall: And the other called Officers, that for wages are hired, for to have the neceſſary doings in the ſervice of the houſe and the poor.

The Governours ſo change, that the one halfe remaineth two yeers in their governance, to help and inſtruct the later elected, which alſo become Inſtructers to their followers. And theſe are in number twelve, whereof four are Aldermen; and the reſidue Communers, and according to their governance, thus are they named.

The Preſident, alway the Seniour Alderman.

Surveyors four, two Aldermen, and two Communers.

Almoiſners four, one Alderman, and three Communers

The

The Order of the Hoſpitall.

The Treaſurer a Communer.

Scrutiners, two, both Communers.

The Officers are ſeven in number, continuable or removable, as the governours ſhall finde cauſe, and bee thus called.

The Hoſpiteler.
The Renter Clerk.
The Butler.
The Porter.
The Matron.
The Siſters, twelve.
The Byddles, eight.

Theſe are alſo as in a kinde by themſelves, three Chirurgians in the wages of the Hoſpitall, giving daily attendance upon the cures of the poor.

And a Miniſter named the viſitour of *Newgate*, according to his office and charge.

The Governours are alwayes elected by the Lord Maior and his brethren, who yéerly electeth ſix, that is to ſay, two Aldermen, and four Commoners, which are admitted into the Hoſpitall, after this manner.

The whole Company of the twelve old Governours, ſitting in Aſſembly together, cauſe their Clerk to read unto the ſix newly elected, the charge hereafter following.

The Charge.

IT may pleaſe you to underſtand, that yee are here elected and choſen, as fellow governours of this Hoſpitall, to continue by the ſpace of two yeers. By all which time according to ſuch laudable degrees and ordinances

Two typical pages from the Orders and Ordinances of St. Bartholomew's Hospital.

waves of the State may exhaust themselves in vain.

MUST SAY PRAYER BEFORE DISCHARGE

Early patients at St. Bartholomew's Hospital, London, which celebrates in June its 800th anniversary, were required before discharge from the institution to say a prayer of thanksgiving to God. This prayer must be said "upon their knees in the Hall before the Hospitaler, and two Masters of the House at the least." The hospitaler further must see that the patients know the prayer "without the book." The following is the text of the prayer:

"We magnifie and praise thee O Lord, that so mercifully and favourably hast looked upon us miserable and wretched sinners, which so highly have offended thy divine Majesty, that wee are not worthy to bee numbred among thy elect and chosen people; our sins being great and grievous are daily before our eyes, we lament and be sorry for them, & with sorrowfull heart, and lamentable teares, we call and cry unto thee for mercy. Have mercy on us O Lord, have mercy upon us, and according to thy great mercy, wipe away the multitude of our sins, and grant us how O Lord, thy most holy and working spirit, that setting aside all vice and idleness we may in thy fear walk, and go forward in all vertue and godliness. And for that thou hast moved O Lord, the hearts of godly men, and the Governours of this house, to shew their exceeding charity towards us, in curing of our maladies and diseases, we yeeld most humble and hearty thanks to thy Majesty, and shall incessantly laude and praise thy most holy and glorious name. Beseeching these, most gracious and mercifull Lord, according to thy holy word and promise, so to bless this thine own dwelling house, and the faithfull Ministers thereof, that there be here found no lack, but that their riches and substance may encrease, that thy holy name may thereby bee the more praised and glorified, to whom be all laud, honour, and glory, world without end. *Amen.*"

$100,000 FOR BETH ISRAEL HOSPITAL RAISED IN TEN MINUTES

Bernard K. Marcus, president of the Bank of United States, and a director of the Beth Israel Hospital, New York, was entertaining twenty friends at dinner the other evening in his home at 525 West End Avenue when a discussion arose about the hospital's new building, now being erected in Livingston Place, between Sixteenth and Seventeenth Streets.

When the host mentioned that the new hospital will have 300 rooms, the suggestion was made that each of the twenty men present subscribe $5,000 for an individual room, in memory of the donor. In less than ten minutes $100,000 had been subscribed for twenty rooms.

The Brooklyn Hospital on April 4 took over the work of St. Christopher's Hospital for Babies, transferring the babies to its own children's department. St. Christopher's was incorporated in 1897 and since that date has been caring for babies under three years of age.

ROCKEFELLER REPORT PICTURES IDEAL TRAINING SCHOOL FOR NURSES

By MARY C. WHEELER, R.N., Superintendent, Illinois Training School for Nurses, Cook County Hospital, Chicago.

The ideal school of nursing as pictured in the book, "Nursing and Nursing Education in the United States," recently off the press, is presented by Miss Wheeler in the accompanying review. The volume, a work of 585 pages, includes the report of the Committee for the Study of Nursing Education (published in its preliminary form in the August, 1922 issue) and the report of a survey of twenty-three nursing schools conducted by Miss Josephine Goldmark, secretary of the committee. Miss Wheeler's review is not so much an interpretation as an abstract, and is for the most part couched in the report's own words. Page references are given to make the report accessible for intensive study.

THE interesting task of closely observing twenty-three selected schools of nursing in the United States, classifying their like conditions, weighing results and pointing toward an ideal, has been accomplished.

The investigations were made by the Rockefeller Foundation and its report will undoubtedly become the basis for introspection and measurement of nursing schools.

Part "A" of this report considers the function of the nurse: public health nursing; the nurse in private duty; the nurse in institutions.

Part "B" considers the training of the nurse.

Because the school of nursing is fundamental to an efficient nurse, regardless of her later function, the writer desires to bring out more clearly the picture of the standard as recommended.

"Our studies of the nurse in action," says the report, "have thrown into relief some of the strong and some of the weak features of that training; its prime asset in teaching the symptoms and care of disease, without which the teacher of health is fatally handicapped; its weakness in failing to give due weight to the prevention of disease broadly conceived, and in failing owing to a variety of causes to meet the greatly increased demand for applicants of high calibre." (p. 187).

To relieve undue anxiety and to instill hope for all who are interested in schools of nursing, it is stated, in urging changes, that the appeal is not to an impossibly ideal condition but to a condition already approximated in some hospitals and accomplished in others. (p. 453). The weakness and failures found too abundantly true of these schools as studied are obviously even more true of the inferior schools. (p. 191).

Schools comparing themselves with the proposed standard must know that the twenty-three schools selected for this fundamental study were chosen from schools connected with hospitals both publicly and privately supported, hospitals carrying from 50 to 2,700 beds, both general and special. (p. 190). The enrollment in these schools covered the records of 2,406 students. The study was made with the idea of advancing the genuine education of the woman as a nurse rather than furnishing a nursing service to the hospital. It is on the pattern of the better schools that the future must be modelled. (p. 191).

The school's activities depends on the financial and educational policy, or lack of policy, of the hospital (p. 188), the equipment and clinical facilities offered, in the type and number of patients, and the ratio of students to patients. It is influenced from within by the requirements of the student for entrance, the curriculum, the methods of training, the hours on duty, the living conditions, and the social relations.

The real motive of a student in wishing to graduate from a creditable school of nursing is to "relieve suffering and to save life" (p. 194) by developing "technical skill, observation, mental alertness, judgment and personality." (p. 212).

To develop this finer type of nurse the report discusses the following points in a most unbiased and liberal way.

Management and Endowment

The management and endowment of the school should be independent of the hospital in whose wards the students receive their clinical training; the school is educational. (p. 206). In such hospitals as continue the school as a part of the hospital organization, there should be appointed by the board of trustees a training school committee, ideally composed of both men and women, a representative of the board of trustees, medical staff, persons known to have had experience in education, member of the alumnæ of the school, with the superintendent of the hospital and of the

training school as *ex officio* members. (pp. 206-208). "The hospital trustees in their turn are charged with many diverse duties towards patients, medical staff, nurses, the community. They are over-burdened with the business of running the hospital." (p. 205).

"The publicity sense which is so admirably exploited in behalf of other needs of the hospital might be effectively enlisted in behalf of the training school, if the board were in command of the facts, and if the public were aware of its stake in nursing education. For we face here a problem not only of education but of nursing service and consequently of the public safety or danger. The hospital which uses students for its sole nursing staff, without adequate teaching, supervision and suitable conditions of living, in effect jeopardizes the lives committed to its charge." (p. 210). "Thus the young nurse is called upon for observation, knowledge and judgment she has had no time to acquire. Whatever her errors, the responsibility for breaking faith with the public must be on the heads of the hospital authorities rather than on hers." (pp. 313-314).

The policies of the institution should be furthered by the superintendent of the hospital, the superintendent of the nursing service and assistants. The nursing staff should consist of a superintendent, (pp. 205-206, 279, 542-545) and educational director, (p. 290) instructors, (pp. 232-235, 256-297, 545-550) supervisors, (pp. 244-247, 309), headnurses, (pp. 227, 248, 309) a permanent graduate staff both for day and night duty, (pp. 359-360) and such other persons as are necessary to carry non-nursing duties, (pp. 212, 234, 235, 290, 326, 342-345, 347-355, 362-365).

Many Schools in Hospitals too Small

In comparing clinical facilities the report states that "no single norm can be dictated as obligatory to the various types of hospitals considered. Plainly, large hospitals with rich clinical facilities offer possibilites of training which cannot be duplicated in smaller institutions. About 40 per cent of the total number of schools of nursing (1,800) are maintained by hospitals too small to offer nurses' training. The adequacy of clinical facilities is of fundamental importance to the equipment of the nurse; they are the laboratory in which the student receives her practical training. If training in all major services is provided for, its value must still depend on the guarantee of variety and adequacy afforded by the number of beds they contain or the acuteness of the service." (p. 213).

The major services are listed as medical, surgical, obstetric, pediatric, with desirable additions of communicable and mental and nervous. (pp. 215-219). "In connection with teaching and supervision in bedside care, it is important to point out the superior advantages of the wards over private service, the value of which in teaching has often been over-emphasized. In the private service, restricted experience of one or two cases is offered in place of the greater range and variety of opportunities provided by the open ward. (pp. 317-318).

The ratio of patient to student "must vary to some extent with the type of hospital, since the number of patients a student can properly care for depends upon the nature of their illnesses. Five patients are generally held to be the maximum number that a student in the great majority of cases can satisfactorily tend." (419). This estimate is for day duty. The estimate for night duty is 10 patients to one student. (p. 440).

Closely linked with the clinical facilities for the successful teaching of both theory and practice of nursing is the equipment. Standard furnishings and supplies throughout the hospital like that provided in the demonstration rooms are of essential importance for uniformity of technique. (p. 249) Special rooms for teaching such as a demonstration room, (pp. 235-237) diet kitchen (pp. 320-321) and properly equipped laboratories are other necessities. "Fatigue and overstrain must obviously and gravely affect the student nurse's efficiency." (p. 422) "The student suffering from the unavoidable fatigue of the longer day is less swift and deft in her movements, less alert, less energetic in her attack on work than the student working on the shorter schedule. It is a question also of the public safety. The well-known relation of fatigue to accidents and spoiled work in industry has rarely been invoked in respect to nursing service. Yet the analogy is in fact a close one." (p. 423) "It might as well be frankly admitted that, with the longer schedules of hours still generally in vogue, it is impossible for the school to redeem its educational promise; excessive hours of service leave neither time nor energy for sound educational work." (pp. 406-408, 424)

Recommends Eight-Hour Day

A comparison of hours on duty shows a range from 51 to 60; an average of 54 hours weekly (p. 410). "In the three-fold interest of health, of efficiency in practical work, and of education and study, it is recommended that hours of duty for the student nurses should not exceed eight in one day or 48, preferably 44, in a week." (pp. 424-426) Class work should be included in duty hours and ultimately study also. (p. 458)

"The total time devoted to night duty should not be disproportionately long to the entire course of training; it should be no longer than is strictly necessary to assure the special educational values aimed at." (p. 427) It is recommended that students undergoing long periods of night duty should be assured of the relief of a weekly holiday; sleeping quarters arranged for quiet and privacy and that students should not be awakened to attend class until after adequate rest; not assigned until after having been in training a reasonable length of time; given adequate supervision; be placed in charge of a manageable number of patients. (pp. 427-428) The study of "the assignments of night duty show no evidence of effort on the part of the training school authorities to make the student's experience fruitful in compensation for its essential physical cost." (p. 431) "Two months would indeed seem a sufficient total length of time for night duty experience." (p. 432) These two assignments are recommended for one month medical and one month obstetrical. Assignments should not exceed one month and sufficient time allowed between assignments to regain physical loss. (pp. 426-441, 459)

Full-Day Instead of Half-Day Rest

Time off duty should be changed from two half-days to one full day's rest in seven with adequate previous notification of the same (pp. 413-414). The question of overtime in the operating and maternity services is solved by "so staffing the operating and obstetrical departments with graduates and paid assistants that students are not alone responsible for the running of the department." (p. 418)

Two vacations are recommended in periods of not less than one month with adequate notification. (pp. 420-421)

Necessary to a good quality of physical and mental health are normal living conditions. (pp. 442-452) The living quarters should be detached from the hospital buildings, with single rooms, meals served in the nurses' residence rather than in the hospital, adequate provision for convenience and comfort. Libraries, study rooms and hall for various gatherings and amusement, under a social director and under the rulings of student government should be provided.

As regards entrance education, the completion of four years' high school is upheld. Statistics show the fact that 78.2 per cent of the 2,082 students reported from the 23 schools, had had four years high school or its equivalent. (pp. 212, 219-221) As a result of surveys regarding age admittance, in the space of seven years the age requirement for entrance has been lowered two years. To recruit students, it is therefore important that, with completion of high school required for entrance, the age of admission to training coincide with the age of graduation. (p. 221)

Physical examination of candidates is required in the better schools. It would be highly desirable in the interest of the stable student body to supplement this by some method of determining the grade and type of the intelligence and character of applicants. (p. 458)

Allowances Count Little

How little the giving of allowances counts in the group of schools studied as an inducement to candidates and how little the charging of tuition acts as a deterrent is shown by the relatively large enrollment of students in the schools charging tuition and making no allowances. The better education and living advantages appear to outweigh the comparatively small money inducement in attracting candidates of good calibre. (p. 222)

In many schools the turnover of probationers is high, rising to 50 per cent of the entering class. Withdrawals are listed as due to tempermental or physical unfitness, ill-considered training and unnecessary hardships of the preliminary term and to the present low standards of entrance requirements which admit to many schools candidates obviously uncapable of training. (p. 230) "It is evident from this brief summary that many of the schools, even in our picked group, are unfitted, as at present conducted, to offer a three-year nursing course. (p. 218) "In our opinion the reduction of the present three-year course is of the first importance both in order to aid in meeting the increased demands for nursing service of all kinds in all parts of the country, and to aid in recruiting students who may well hesitate to devote three years to a training to which they may be willing and able to give a shorter period of time. (p. 459)

This reduction can be effected by the following means:

By the elimination of services of least value for student training, such as private duty.

By the radical reduction of other services in which students now spend time totally disproportionate to the educational value of the service, such as the surgical wards, the surgical supply room, the diet kitchen.

By the saving of time now educationally barren in the first year for lack of theoretical instruction later given to explain the nursing and treatment of the diseases encountered; and finally

By the saving of training educationally barren in the third year through the monotonous repetition of duties.

Against this reduction of time we must, however, allow for the various necessary improvements in training already noted. (p. 460) In many schools

in ungraded repetition of duties it is estimated that more than one-fifth of the student's time is absorbed in duties unrelated to her training.

Outline of Preliminary Training

The first four months of training should be devoted to intensive study for the most part in classroom and laboratory. There should be no regular ward duty. Students should be taken to the wards for concrete application and illustration of their studies, and to enable them to orient themselves in a new and complex environment. (p. 461)

Division of services following preliminary term are suggested as follows:

1. Medical ..... 6 months
   Including:
   - General
   - Skin
   - Venereal
   - Communicable
   - Tuberculosis
   - Diet kitchen

   Mixed service stated by school to be medical (p. 199)
2. Mental and nervous ..... 2 months
3. Surgical ..... 6 months
   Including:
   - General
   - Gynecological
   - Orthopedics
   - Operating room
   - Recovery
   - Urological clinic
   - Eye, ear, nose and throat
   - Surgical supplies

   Mixed services stated by school to be surgical (p. 199)
4. Obstetrical ..... 3 months
5. Pediatrics ..... 2 months
6. Dispensary ..... 3 months
   Including:
   - Medical clinics
   - Surgical clinics
   - Childrens' clinics
7. Vacation ..... 2 months

Total ..... 24 months

"But the most carefully planned transition from classroom instruction to ward practice must be carefully checked to insure a standardized technique. Chief among the means of insuring such standardizing is supervision as detailed and exacting as that in the classroom. (p. 244)

Nursing practice cards are a valuable means of making certain that each student has had practice in all procedures and that her technique is up to the school standard. (pp. 248-249, 314-316)

Students entering nurses' training represent very different degrees of education. It is a mere matter of justice that some adjustment shall be made. Credit is less commonly granted for previous training than for ground covered in college classroom or laboratory. This is due to the unstandardized condition of technique in the training school and the natural feeling that a school can guarantee only its own teaching methods. (p. 224-226)

Graph 1 (p. 198) shows many discrepancies between the time planned for each service and the actual time spent in the same. It becomes apparent that responsibility for the present status of teaching rests on no single individual but in a complex and baffling situation. The superintendent of nurses is at once head of the hospital nursing staff and principal of the school. Her responsibilities are dual: to provide nursing care to patients and to provide the education promised to the students by the school in its printed program. (pp. 201-202)

A carefully graded course is more or less closely followed at many hospitals and the assignment of patients is planned so as to afford the student a genuinely educational gradation of clinical experience. (pp. 297-307) In order that the nurse may appreciate the medical treatment and participate in it intelligently it would appear that she should be acquainted with the patients' records, medical and social, from diagnosis to end result. (p. 316)

Following the review of the students practical training and its problems the theoretical instruction is considered which is to interpret for her the cases and conditions which she encounters. (p. 367)

From adequate science teaching, aside from acquiring specific information, the student nurse, like other students, acquires certain general benefits which may be briefly summarized: training in accuracy of observation and of statement; training in manual dexterity through the exact use of material and apparatus; training in patience of observation and judgment in drawing conclusions. Of all these benefits, it must be clear, the manual skill, patience, and judgment are qualities primarily demanded by the issues of life and death and by the complexity of human relations among which the nurse is soon to play her part. (p. 251)

The proposed preliminary schedule in the fifteen weeks, (p. 462) is as follows:

Subjects	Total Hours	Hours per Week	
		Lecture	Laboratory
Chemistry	60	2	2
Anatomy and Physiology	90	2	4
Bacteriology	45	1	2
Elementary Nursing (including Bandaging and Hospital Housekeeping)	90	2	4
Personal Hygiene	15	1	—
Dietetics and Cookery	60	2	2
Introduction to Social Aspects of Disease	15	1	—
Drugs and Solutions	15	-	1
	390	11	15

Instruction during Ward Training

The proposal for theoretical instruction during ward training (p. 469) is given as follows:

	Hours
Nursing in medical diseases	45
Elementary pathology	15
Materia medica	30
Diet in diseases	15
Massage	15
Nursing in surgical diseases, including: Gynecology, Operating room technique, Orthopedic training	45
Nursing in special diseases: Eye, ear, nose and throat, Skin	15
Obstetrical nursing	30
Nursing in diseases of infants and children	30
Nursing in communicable diseases, including: Venereal, Tuberculosis	45
Nursing in mental and nervous diseases	45
Applied medicine and public health	30
Social aspects of disease (supplementing preliminary course)	15
History of nursing, including: Ethics, Professional problems	45
Total hours	450

The theory should correlate with the ward assignments and be a part of the 44 hour per week duty. The methods used are as follows: lectures, dictation, outlines, notebooks, recitations, quizzes, clinics, demonstrations, laboratories, autopsies, medical museum, x-ray.

The equipment needed: laboratories, bones, models, microscopes, fresh materials, preserved specimens, atlases, charts, text and reference books. The instruction should be given by especially prepared nurse instructors, physician-instructor and carefully selected specialists.

"Few reliable statistics are available on the morbidity of student nurses as shown by their days of absence from duty. It is well established that absence is most common during the first year." (pp. 227, 397)

Valuable Results of Centralized Teaching

In order to standardize the training in private and special schools an extensive system of affiliation is needed before such schools can offer adequate training. (pp. 216, 218-219, 457)

As an attempt to meet the scarcity of teachers arrangements have been made with the "visiting teacher," (p. 291) the Y. W. C. A. colleges (pp. 294-95), medical schools and universities to help in the problem.

Centralized teaching has also been attempted with many valuable results. Those at Toronto and Philadelphia are reported. This system of centralized teaching is in effect transitional to the plan already in practice in a number of university centers by which the training school becomes an integral part of the university. (p. 297)

Any changes at all, however small in the beginning, mean an increase in cost. But it is an increase of cost which is not new or avoidable; indeed this increase has already begun. (p. 454)

"It is evident that the dilemma of the training school is at bottom a financial one. Its failure—the worst failure of which an educational institution can be guilty—is the failure to teach. Now the cause of this failure is primarily the lack of money, without which the school cannot provide teachers, nor teaching equipment, nor even a place to teach; without which it is impossible to supply the supplementary nursing service to staff the wards while the students are given the classroom instruction that is to accompany, interpret, and illuminate their practical ward training. In a word, without sufficient funds, the wisest educational program must be frustrated." (p. 209)

A list of reasons why some schools of nursing fail and of factors contributing to the failure, as given in the report, is given below:

Why Do Schools of Nursing Fail?

None of them have all, but all of them have some.

Tradition. (p. 192)

Continuance of the apprenticeship system. (pp. 193-194)

Needs of sick predominate; the needs of education must yield thereto. (pp. 195-196)

Lack of paid group of graduate nurses and others to meet the hospital need, relieving the student body of non-nursing duties. (pp. 200, 359-365, 454-455)

Irregular assignments. (pp. 203, 318, 326, 302)

Failure to extend the education promised in catalogue, (pp. 202, 205)

Failure of superintendent to show the board the impossible nature of task. (p. 202)

No training school committee. (pp. 206, 308-309)

School remains as a department of the hospital. (p. 207)

Very great financial need. (pp. 209, 210, 293, 366)

Lack of cost accounting. (p. 211)

Failure to prepare a subsidiary nursing service. (pp. 212, 213)

Many schools accept low educational entrance standards. (pp. 212, 457)

Failure to include all services, such as communicable and mental and nervous. (pp. 212, 213)

Understaffing of wards. (pp. 215, 244, 247, 310, 418)

Lack of adequate supervision. (pp. 215, 244, 312)

Careless technique. (pp. 215, 244, 307, 314)

Lack of sufficient and proper affiliations. (p. 216)

Failure to use case records. (p. 340)

Understandardized condition of technique. (p. 226)

Headnurse has no time for teaching. (p. 227)

Need of appointment of full-time instructors. (p. 233)

Poor planning, in that instruction does not precede technique. (p. 243)

Theory and practice often taught by different women, differently trained, without conferences. (pp. 243, 247)

Lack of well qualified teachers. (257, 293, 346)

Neglect of suitable laboratory instruction; (270) equipment. (pp. 258, 271, 287)

Insufficient allowance of time for study. (pp. 257, 277)

Overcrowded character of courses. (pp. 277-279)

Waste of student's time. (pp. 282, 289, 299, 342-343, 347, 348-354)
Duplication of effort. (pp. 282, 329, 304, 355)
Lack of endowments. (p. 290)
Lack of graded training. (p. 298)
Use of student as headnurse. (p. 301)
Lack of conferences. (p. 309)
Lack of adequate records. (p. 315, 342)
Lack of correlation between practice and theory. (pp. 322, 375, 396-397)
Failure to use dispensary and clinics as teaching field. (pp. 330-331, 334-341)
Lack of educational planning. (pp. 336, 356)
Too much stress placed upon curative medicine to the detriment of preventive medicine. (p. 369)
Psychology, public health and social service not included in curriculum. (pp. 376, 382)
Excessive length of hours on duty. (pp. 407-408, 415, 437)
Classwork in evening hours. (p. 411)
Failure to provide one day's rest in seven and to notify student of days off. (p. 413)
Assignments of night duty service disproportionately long. Too close together. (427, 435)
Class hours interrupt sleep, when on night duty. (p. 439)
Living conditions second consideration. (p. 442)
Retaining the three-year course. (460)

LAY CORNERSTONE OF JEWISH HOSPITAL WING IN BROOKLYN

More than a thousand persons participated March 25 in the laying of the cornerstone of the new $500,000 wing of the Jewish Hospital in Brooklyn, known as the Abraham Abraham Memorial. The construction of the new wing was made possible by the initial gifts of the widow of Abraham Abraham, a merchant and philanthropist, who was the first president of the institution.

During the ceremonies the officials of the Jewish Hospital announced the completion of plans for the construction of another wing to the building and the donation of $75,000 needed for the work. Hardly had the cheers which greeted this news died out when it was announced that the hospital had taken title to sixteen lots adjoining the site of the new memorial. The acquisition of this property makes the hospital the owner of the entire block bounded by Classon Avenue, Prospect Place, the Brighton Beach Railroad and St. Mark's Avenue.

Following this news, Nathan S. Jonas, president of the Manufacturers' Trust Company and the founder of the Jewish Hospital, told those present that he and his wife would convert the barren lots into a playground and recreation park for the convalescent patients and the nurses. It was announced that Dr. William Linder had contributed $10,000 to convert six rooms in the old hospital building into operating rooms and that Dr. Joshua Ronsheim, at his own expense, would equip a maternity room for the institution.

Rabbi Alexander H. Lyons of the Eighth Avenue Temple delivered the invocation at the opening of the ceremonies. Supreme Court Justice Edward Lazansky presided and introduced Joseph J. Baker, president of the hospital. Mr. Baker in turn introduced Mrs. Percy Straus, daughter of Abraham Abraham, who laid the cornerstone. Mrs. Straus used a silver trowel. Inside the stone was placed a box with newspapers, coins and records relating to the hospital.

After the stone had been laid the ceremonies were transferred to the auditorium of the nurses' home and training school attached to the hospital. Addresses were made by Justice Lazansky, Mrs. Straus, Mr. Baker, Dr. Leon Louria, Mr. Blum and Albert L. Levi, who was president of the organization founded in 1902 for the purpose of gettng funds for the hospital.

When completed, the hospital, which is non-sectarian, will have 400 beds.

FIVE STATES UNITE IN CONVENTION

Five states are to be represented this month at a hospital convention in Minneapolis. To the Tri-State Hospital Association, whose second annual meeting is scheduled for May 17-19 at Curtis Hotel, Minneapolis, has been added the states of North and South Dakota. The original Tri-State association was made up of hospital workers in Minnesota, Wisconsin and Iowa.

The following program has been arranged for the Five-State convention:

Thursday Morning, May 17

Invocation, Rev. Dr. Phillips E. Osgood, Minneapolis.
Address of Welcome, Mayor Leach, Minneapolis.
Paper, "Special Problems of Hospital Administration," A. O. Fonkalsrud, Trinity Hospital, Minot, N. D.

Thursday Afternoon

Paper, "The Patient—How to Provide for his Comfort While in the Hospital," Miss Elizabeth Meyer, superintendent of nurses, St. Luke's Hospital, St. Paul.
Paper, "The Hospital Laboratory," Dr. Kano Ikeda, pathologist, Minneapolis General Hospital.
Paper, "The Hospital and the Health Department" Dr. F. E. Harrington, health commissioner, Minneapolis.

Thursday Evening

Various state meetings.

Friday Morning, May 18

Paper, "Recent Reports of Nursing Education," Miss Adda Eldredge.
Paper, "Nursing Education," Dr. Richard Olding Beard, University of Minnesota.
Paper, "The Nursing Situation in Minnesota," Miss Irene English.

Friday Afternoon

Paper, "How to Conduct a Staff Meeting and the Utilization of Hospital Records," Dr. Charles R. Drake, chief of staff, Swedish Hospital, Minneapolis.
Paper, "The Hospital Intern," Dr. H. B. Sweetser, president, St. Mary's Hospital staff, Minneapolis. Discussion by Dr. E. P. Lyon and Dr. J. C. Litzenberg.
Round table, conducted by Dr. A. B. Ancker, City and County Hospital, St. Paul.

Friday Evening

Address, "The Hospital and the People," Hon. L. C. Hodgson, board of control, St. Paul.
Address, "The Hospital as an Educational Factor," Dr. Arthur Sweeney, Ramsey County Medical Association.

Saturday, May 19

Visits to hospitals, institutions and business houses.

James A. Tobey, Washington representative of the National Health Council for the last two years, has been appointed administrative secretary of the Council with headquarters at New York City. He will succeed Walter Clarke, who has resigned to study medicine during the next five years in Europe.

THE NEW BOSTON LYING-IN HOSPITAL

By COOLIDGE & SHATTUCK, Architects, and JOSEPH B. HOWLAND, M. D., Consultant, Boston, Mass.

AFTER ninety years of service, the last fifty of which were at the quarters just vacated, 24 McLean Street, the Boston Lying-In Hospital is established in its new buildings on Longwood Avenue.

In moving to its new site the hospital becomes one of a notable group of institutions engaged in some phase of medical work. These institutions, now eleven in number, surround the stately group of marble buildings of the Harvard medical school. Power house service is furnished from the service station owned by Harvard University to the entire group, with one exception.

Two buildings have been completed, the hospital and a residence for women employes and nurses. In the future a private ward is to be built, the three forming a U-shaped group.

Designed After Florentine Palaces

In designing the hospital building, it seemed desirable to give the exterior a somewhat light and delicate treatment as a slight indication for the purpose of the interior. This suggested at once the Florentine palaces of Italy with their open loggias, soft colorings and refined detail.

For economy and durability, only the usual building materials of brick and stone trim were used, relying on the different possible textures and colorings to avoid a monotonous effect. To this end three or four different shades of a buff mottled brick were combined, with the trim of concrete stone made to imitate a honed surface limestone. For fireproofing reasons the cornice was made of copper and concrete, formed and colored as were the decorative wooden cornices of the before mentioned palaces.

The completion of the private ward on the west will make a broad court opening toward the south. The court enclosed on the street side by planting and a simple iron fence will do much toward forming this U-shaped group of buildings into one large unit. The accompanying photographs show clearly the uses to which the various floors are put so that no attempt will be made to describe them in detail.

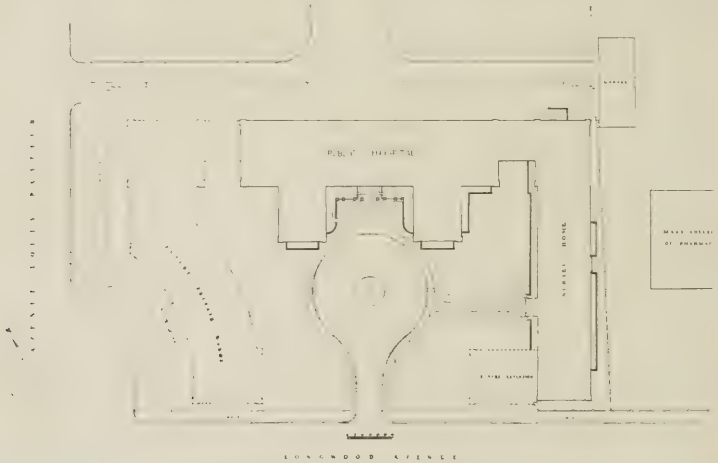
The construction of the hospital building is fireproof, the floors of concrete and the partitions of terra cotta. Everywhere hard plaster is carried up on the walls to the height of six feet. A four-inch terrazzo sanitary base of black cement and

The new Boston Lying-In Hospital is in the style of the old Florentine palaces and is made of three or four different shades of buff mottled brick.

black Belgian marble laid at an angle of 45 degrees is carried through all corridors and rooms of the hospital building. The first floor corridor and trustees' room have black and white tile-effect rubber flooring. The same material in gray is used in all operating and delivery rooms. Rubber tile is also used in toilets and bath rooms. The rest of the corridors and the wards have a floor covering of battleship linoleum either brown or green in color. The kitchen, diet kitchens and utility room floors are of red quarry tile.

In general all rooms and wards in the hospital building having a southerly exposure are painted a light gray. Rooms on the north side of the building are painted a light buff. Bath rooms and utility rooms are finished in cream enamel. The operating rooms are of white enamel with a gray dado six feet high.

The nurses' home is painted throughout in a light gray.



Plot plan of Boston Lying-in Hospital.

Mechanical Equipment Most Modern

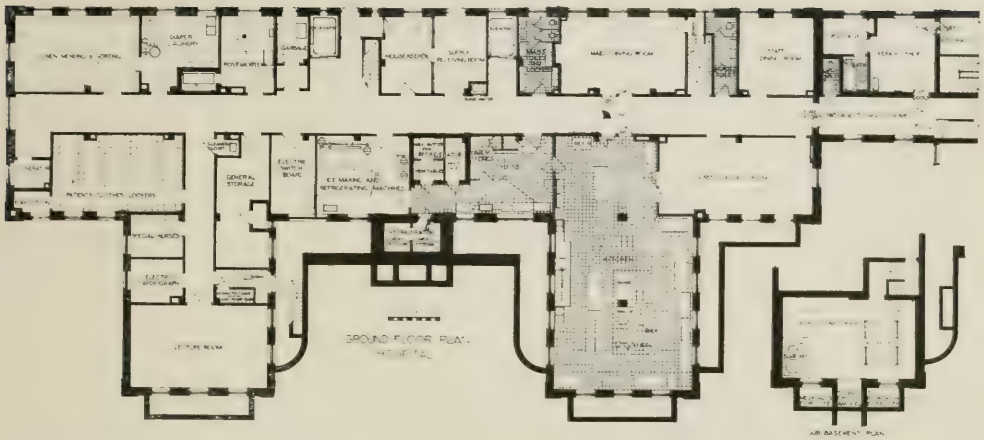
Since no boiler plant is provided in the buildings, the group derives the necessary steam for the several heating systems and for the various utilities from an outside source. A high pressure service main and a general pump return main are carried in a pipe tunnel to the main hospital building, with branch tunnels to the nurses' home and for the future private ward building. The steam pressure is reduced in each building for direct heating and domestic hot water service systems and for a medium pressure system for all utilities, such as sterilizers, stills, laundry apparatus, kitchen apparatus, etc.

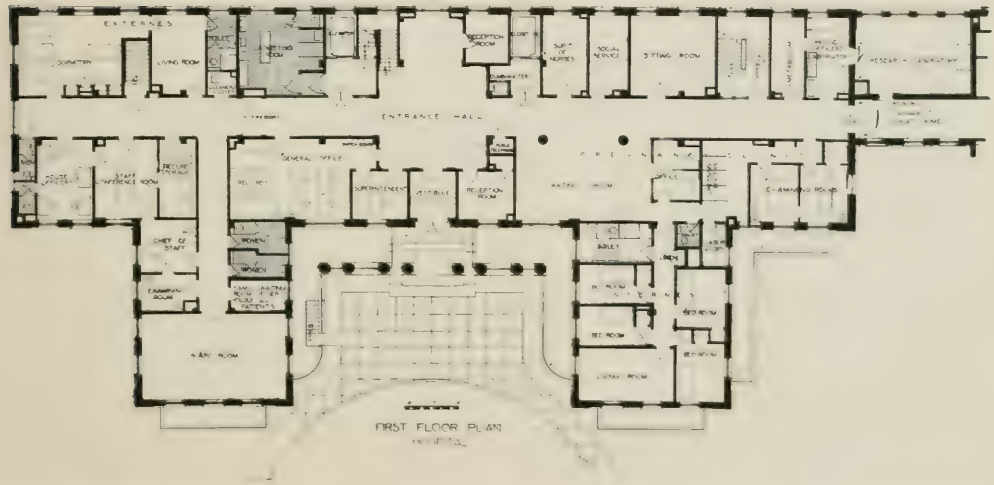
The hospital building and nurses' home are heated by direct radiators and pipe coils and are operated on what is known as a "modulation" system, having graduated supply valves placed on radiators and coils, allowing a part or all of the heating surface to be utilized as occasion demands. The return connections from radiators and drip connections from mains and risers are provided with thermostatic valves, discharging condensation to a vented pump and receiver, which in turn discharges condensation to source of supply.

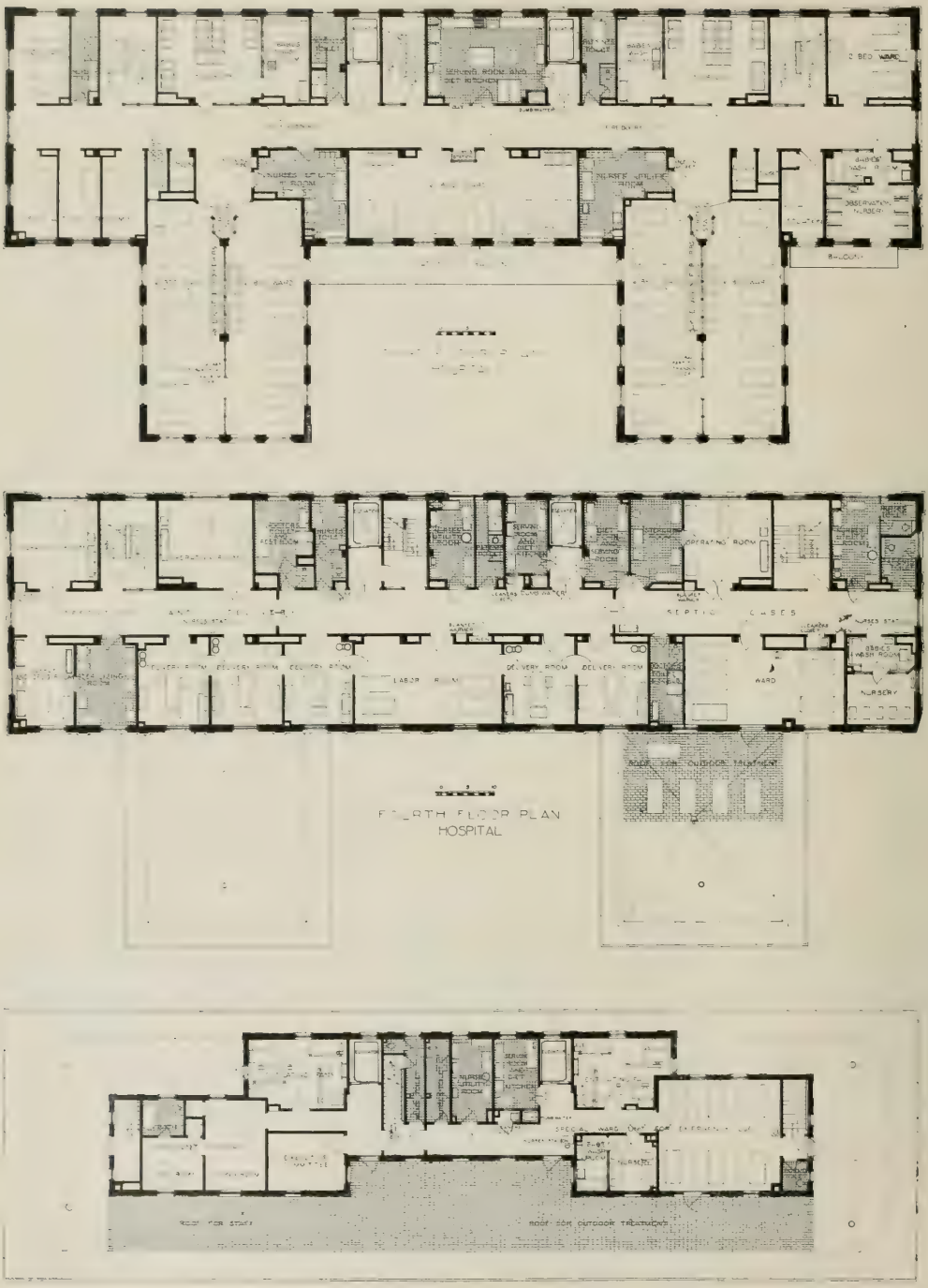
The hospital building, in addition to the general heating system, has a separate "summer" service supplying radiators in nursery, premature nursery wash rooms and operating rooms, thus enabling these particular rooms to be heated during early spring and fall or damp days in summer. The hot water heaters are also connected to this "summer" service. Automatic temperature regulation for maintaining different temperatures in accordance with purpose to which rooms are employed has been provided for practically all rooms.

All rooms, except general offices and a few service rooms, where ventilation is not required, are provided with exhaust ventilation. Separate vent flues from these rooms are extended to a vent space above fourth floor ceiling and then connected to horizontal ducts leading to vent fans located in two fan houses on the fifth floor. The vitiated air is then discharged by these fans to outside air.

Vent flues in each room are arranged with two openings, one placed near ceiling and one near the floor. The top opening is fitted with a full register operated by a cord and pull attachment. The bottom openings are fastened to a steel welded frame, set flush with the plaster, permitting ac-


GROUND FLOOR PLAN
HOSPITAL

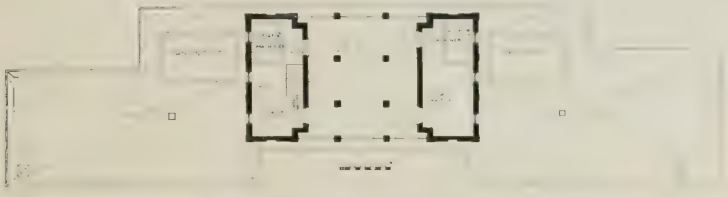

ENTRANCE HALL
FIRST FLOOR PLAN
HOSPITAL



Fifth floor plan, Boston Lying-in Hospital.

cessibility for cleaning. The vent flues and horizontal vent ducts for all labor and delivery rooms are insulated, preventing transmission of sounds between these rooms and others.

The ventilation is divided into seven divisions, each division having a separate vent duct system and fan equipment. The divisions are as follows: mortuary room; general rooms; incinerator and sulphur sterilizing room; water closet and utility room; premature nursery; main kitchen, diet kitchen and dining room; sterilizing room.



Pent House Plan, Boston Lying-in Hospital.

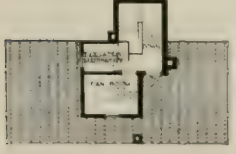
All vent fan apparatus is electrically operated and equipped with self-starter and speed regulators; it is so arranged that it may be started by simply pressing a button in the general office or in fan houses on the fifth floor. Pilot lights in the general office indicate which fans are in operation.

An interesting feature is the treatment accorded to the premature nursery, located on the second floor of the hospital building. Owing to the large percentage of mortality among premature infants, it was considered desirable to regulate the temperature and percentage of humidity contained in the air admitted to this nursery and, in an effort to obtain these results, the following apparatus was installed.

Conditioning Air of Premature Nursery

Fresh air is taken from the outside and warmed by passing over tiers of indirect radiators located in a chamber on the floor below, and is carried through sheet metal ducts and risers to the nursery. A humidifier, consisting of a copper box equipped with a steam coil submerged in water and an automatically operated louvre cover, is located in the horizontal duct, below the risers.

In the nursery are two chambers built around fresh warm air risers, these risers forming the rear wall of chambers and extending up and over the top, terminating in outlet registers. An opening was left in the warm air risers at the top and bottom of each chamber and the top opening in chamber and warm air riser are fitted with automatically operated dampers. Within the chamber there are installed heavy copper wire baskets, fitted with copper drip pans at the bottom and arranged on slides to be easily removable. These baskets are designed to contain lump calcium for absorbing moisture contained in air. Direct radiators, automatically controlled, are placed under each window to offset temperature loss through walls and windows and maintain room temperatures, as desired.



Plan of roof.

Vent flues are located in the nursery, fitted with top and bottom registers, so arranged by means of a rod attachment that when the top register is opened the same operation closes the bottom register, or vice versa. These vent flues are extended to a separate fan apparatus in the fan house and can be started or stopped from the nursery.

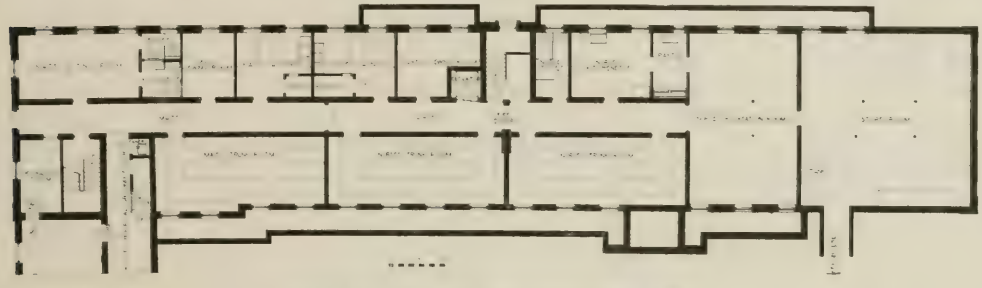
A "positive-acting insertion thermostat" is placed in one of the warm air risers controlling the steam valve to the indirect heater and cold air mixing damper. A "calibrated" wet bulb thermostat, located in the nursery, controls the steam valve to the coil and louvre cover of the box humidifier and also the dampers in the warm air risers and in the top of calcium or dehumidifier chambers. In addition to the above, there are placed on the walls of the nursery, thermostats controlling supply valves to direct radiators placed under windows.

A resumé of the operation of this system would be briefly as follows: When the temperature of air in the nursery rises above the temperature degree desired, the "positive-acting insertion thermostat" operates, closing the steam supply to the indirect heater and in the same operation opens the mixing damper, allowing cooler air to mix with ascending warm air. When the reverse action occurs, that is when temperature falls below degree desired, the thermostat opens the steam supply to the heater and closes mixing damper. In conjunction with the control of fresh warm air supply, the room thermostats operate the supply valves on direct radiators.

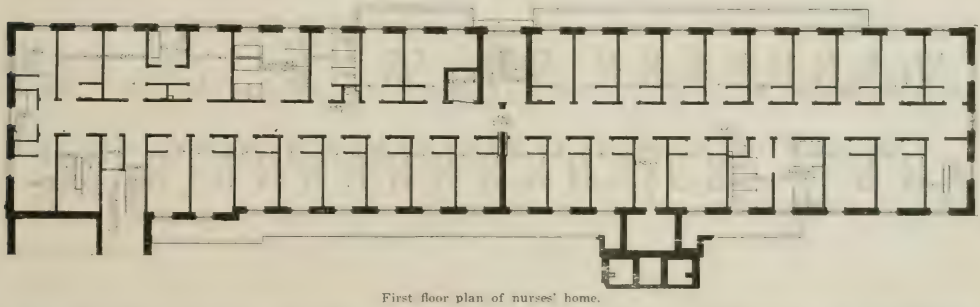
When the humidity of air in the nursery rises above the percentage desired, the "calibrated" wet

GLIMPSES INTO THE INTERIOR OF A MODERN MATERNITY HOSPITAL

bulb thermostat operates, closing the louvre cover and steam valve to the coil in the box humidifiers and in the same operation closes automatic dampers in the warm air risers and opens the automatic dampers at top of dehumidifier chambers, permitting air to pass through and over wire baskets of lump calcium, absorbing in passage the moisture contained in the air before distribution in the nursery. When the humidity falls below the percentage desired, the "calibrated" thermostat again operates, closing the dampers at the top of the chambers and opens dampers in warm



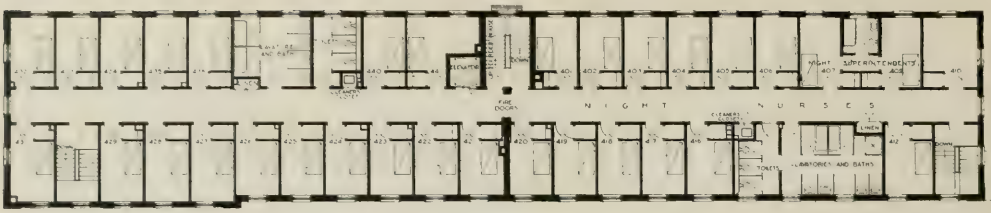
Basement floor plan, nurses' home, Boston Lying-in Hospital.



First floor plan of nurses' home.

Second floor plan of nurses' home.

Third floor plan of nurses' home.



Fourth floor plan of nurses' home, Boston Lying-in Hospital.

air risers and in same operation opens the louvre cover and steam supply valve to the humidifier coil, permitting the water in the humidifier to vaporize and mix with the air.

Temperature and humidity recorders are placed in a prominent position, recording on 24 hour charts the ranges of temperature and humidity.

A refrigerating plan installed in basement provides ice for all hospital purposes and for cooling cold storage rooms and mortuary boxes.

The electric equipment consists of lighting, power and various signal systems, all of which secure their energy from the power plant of Harvard College.

Ward Lights Are of Two Intensities

There are two somewhat unique features in connection with the lighting, namely the special two intensity ward fixtures, which provide for night-light illumination from the same fixture that provides the normal lighting in all patients' rooms and wards. The other is a special illumination by means of artificial daylight fixtures in the operating room which provides a lighting intensity of approximately 75 to 80 foot candles per square foot over the entire working area of the operating room. The quality of the lighting being an exact duplication of daylight; the nature of the fixtures and the rearrangement removing almost wholly any shadows and giving the nearest to perfection possible with artificial illumination.

There are the usual power applications consisting of elevators, dumbwaiters, motors for driving ice machinery, kitchen utilities, etc., as well as provision for future applications for electric cooking in the main kitchen and diet kitchens. There are special applications of electricity in the laboratories and classrooms, also arrangements for small instrument sterilization. Provision also is made for the usual individual bedside equipment for physicians' use.

The elevators, of the push button type, are equipped with a micro-leveling device to insure their stopping at the exact floor level, regardless of the load. This is a great convenience in moving beds from one part of the hospital to another.

The nurses' signal system is high tension being really an extension of the electric light system utilizing substantial fittings, the work being done in a manner similar and equal to the lighting and power wiring.

The building is equipped with electric time clocks, telephones, watchman's clocks and all other modern electric conveniences for signal communication.

While electricity is extensively used and the equipment is very complete, it has been designed in such a manner as to avoid any unnecessary elaboration and to make everything of the most substantial nature with a view of producing highly efficient workable systems of the lowest possible upkeep and the greatest possible freedom from interruptions in service.

There are few unusual features in the new nurses' home requiring description here. The construction of this building is second class, with floors of Georgia pine. A sprinkler system is installed on all floors. In each bedroom there is a sprinkler head inside the door, with the idea that it would serve somewhat as a water curtain to retard the spread of fire and to allow evacuation of the occupants. There is also a sprinkler head in every closet.

The hospital laundry is planned for in connection with the third building of the group not yet built, provision being made for handling infants' laundry only in the hospital building.

HOME ECONOMICS WORKERS TO MEET

The American Home Economics Association is to meet in Chicago, July 30-August 3, it is announced. Sessions will be held at the University of Chicago, and the program is said to be of special interest to institutional workers and cafeteria managers.

Ford Harvey of the Harvey system, Miss Rena Eckman, head dietitian at Michael Reese Hospital, Chicago, and Miss Effie M. Carp of the Kansas State Agricultural College, will discuss various aspects of the institution problem. A section on food and nutrition is expected to prove of value.

Other speakers include Peter A. Mortenson, superintendent of schools, Chicago; Dr. Grace Abbott, chief of the U. S. Children's Bureau; and Dr. Alice Blood, president of the American Home Economics Association.

THE SIGNIFICANCE AND FUNCTION OF PUBLICITY FOR HOSPITALS*

By RALPH WELLES KEELER, Counselor in Publicity, Board of Hospitals and Homes of the Methodist Episcopal Church.

PUBLICITY for a hospital is as essential as publicity for any other form of city-wide or county-wide public service. In many ways it is more essential than publicity for most other forms of community activity, as it has to do with the establishing of confidence in and good-will towards the hospital's ability to provide that service which the sick and injured need. For the day has not yet arrived when the mass of people understand the value of hospital treatment and the untold service which the hospital renders.

In many ways publicity for the hospital is more essential than publicity for most other forms of community activity, as it has to do with the establishing of confidence and good-will. A manufacturer, whose good-will rates high among his assets, declares that it is gained as follows:

By letting people know you have something.

By convincing them that they need it.

By putting it where they can get it more quickly, easily and economically than anything else they might get.

By making and keeping them so glad that they have it that they prefer it to anything of a similar nature that there is to be had.

Public Confidence an Essential

Public confidence is one of the greatest assets that any institution can have. And this confidence is especially necessary if the men, women, and children of the community are to put themselves in an attitude of mind which will lead them to see that the hospital is their institution and will minister to them in their hour of need. Good-will is a part of that confidence which brings people unquestioningly to partake of what you have to dispense, regardless of what it is.

Good-will, however, does not come accidentally. It must be created. And the process is long and continuous. But how create good-will? According to a manufacturer whose good-will rates high among his assets, it is gained as follows: by letting people know that you have something; by convincing them that they need it; by putting it where they can get it more quickly, easily and economically than anything else they might get; and by making and keeping them so glad that they have got it that they prefer it to anything of a similar nature that there is to be had.

There is a challenging suggestion here for every hospital. For the principles stated are as true for a service that one may wish to give to the public as for a commodity which a man manufactures and wishes to sell. Indeed, it is safe to say that the principles mean more in securing good-will for service, as the manufactured article may be seen before taking, while service must be accepted before its value can be appraised.

In few communities do many persons know much about the hospital and what it is doing for the community. There is usually a wall of ignorance and prejudice which stands to prevent the hospital from making known its functions, service and ideals; for the hospital as a place to which people would go naturally when sick or injured is a comparatively new idea. To most persons the hospital is a place of last resort. To many the entering of a hospital means that all hope is past, and as a longshoreman once put it, "they give you the black bottle when they get you once inside." This feeling is due in part to the mystery with which the common people surround everything which a physician does. It is also due in part to the fact that the average education of the American people is of about the eighth grade. This of itself precludes very deep reasoning, especially when the mind is faced with the terror which sickness or serious injury stir into being when the hospital is mentioned as the best place for the patient to be.

Added to the difficulties in getting the public's good-will for the hospital because of the ignorance and superstition of the people, is the failure of many hospital executives to grasp the significance and value of hospital publicity. The following paragraph from a letter written by a hospital superintendent is indicative of a state of mind found in many quarters. He writes: "We do not advertise with printed literature or in the newspapers. We put every cent of money into improving our patients, and we expect our patients to advertise us of their own free will and accord. Service is the thing that will advertise a hospital. It is foolishness to spend money to get people to your

*This is the first of a comprehensive series of articles on hospital publicity which is being prepared for The Modern Hospital by Mr. Keeler.

hospital and then give inferior service. Give the right sort of service and your patients will give you all the advertising you want free. Not one cent is spent by this hospital in advertising." Manifestly this statement reflects as erroneous a conception of the purpose, content and method of hospital publicity as that held by the mass of people concerning the function and service of a hospital.

Some Fundamental Considerations

Whatever else it may include, publicity for a hospital must be interpretative and educational. It must bring to the public it seeks to interest the concrete story of the every day life of the institution. It must point out the contacts which the hospital has with the total life of the community. It must establish in the minds of the people the fact that the hospital is an institution for public service, and that in a very large sense its usefulness will be what the community at large makes it. Serious-looking physicians and surgeons must become human in the minds of the masses. They must be shown to be fellow-men toiling to help men, women and children in the valley of physical suffering. Nurses must come to mean more than stiffly-dressed young women who report to the doctor and take his directions. The full measure of their ministering service must be shown in concrete story. And the tremendous service given to the public through dispensary, examinations and free and part-pay treatment must be so told as to become a part of the thinking of everyone in the community. *The* hospital must become *our* hospital, and the sense of proprietorship can be developed only by carefully prepared publicity material that reaches the very people for whom it is written.

Purpose of Series of Articles

The purpose of these articles, therefore, is to discuss somewhat in detail some of the ways and methods that make for effective, constructive hospital publicity; not the publicity whose usefulness passes with its appearance, but that publicity which develops good-will and confidence and establishes interest for all time. For the institution will go on after we have ceased our labors, and those who follow us should never be obliged to relay the foundations of public confidence and loyal support. They should be able to reach out beyond where we have been able to venture—and to reach out thus because of the character of the educational work we have done in behalf of the institution so near to our hearts.

The basis for all publicity is the usefulness, need and value of the thing advertised. Our *apologia* must be sound and convincing. Is this true in the case of our hospital? There is no questioning the statement that hospitals are greatly needed. Or, that the percentage of recovery in a hospital is one-third greater than in the home? But with this basis and much else that can be said concerning the value and usefulness of hospitals in general, there must be something that can be said specifically about our own hospital. The institution must be of high grade. Its standing in the community must be unquestioned. The character of the work it does must be up to the ideals of the highest standards for physicians and surgeons and the finest type of institution in its peculiar form of service. People are interested only in the best, and people who are asked to give of their means towards the support of institutions do not care to put their money into an enterprise that is not worth while.

All publicity must have a purpose. Much publicity today fails to secure results because this fundamental necessity is not taken into account. One cannot say, "We will have publicity," and forthwith begin the preparation of material to that end. Before the preparation of publicity material there must be a careful study or survey. Otherwise one does not know what material to use, how to prepare it, where to use it or what can be hoped in results.

Discovering Our Publicity Task

This survey involves a thorough-going analysis of the work the hospital is doing, its ideals and needs, the listing of the various types of people who ought to have this information, the form in which the material should be prepared to reach the minds of each different group, the method of its preparation, the channels through which it may best be distributed, and the selection of some one qualified to do publicity work.

In all of this study there must be kept in mind what it is that one hopes to have the publicity accomplish. For every bit of publicity material that goes forth should be so prepared and printed or spoken as to secure, or be a part in the process of securing, certain definite results.

In analyzing the work of the hospital for the purpose of discovering what there is that can be used for publicity purposes, it should be borne in mind that what is commonplace to us as a part of the day's routine, is often of intense interest to those who are unfamiliar with it, if presented to them in an attractive way.

There is a bit of philosophy for us right here in the advertisement of Associated Engravers, Inc., in the *Advertising Club News* of New York City. Under the title "The Same Old Story," the following is printed:

"The leader of the orchestra doesn't like even the best show after the first twenty nights. He hates the comedian and the same old jokes.

"But the box office receipts pile up. The theater is crowded. The people laugh at the same old stories (or what the orchestra thinks are the same old stories).

"So, when we are apt to grow tired of talking about real engraving service, about making the best engravings we can and our ideas of friendship in business—we remember that in this instance we have the viewpoint of the orchestra leader—and we keep on telling the same old story."

It is well to go over each department of the hospital and list up the day's activities from the beginning of one day to the beginning of the next day. This will mean a lot of detailed descriptive material, nearly all of which can be used effectively in the days ahead. It may be the number of loaves of bread or pounds of butter used monthly. It may be the number of beeves or sheep used in a year. It may be six months' consumption of soap or the number of beds made up by the nurses. It may be developments in the research department or some unusual operation. The list will be long and suggestive.

Once everything is carefully listed, the uses that can be made of it all become increasingly apparent. The people who would be interested in one item or another begin to emerge in our thinking. Forms of presenting the material in an attractive way begin to suggest themselves. Channels through which it may go forth on its mission suddenly open up to our mind. The possibilities and magnitude of it all grip us. We realize that it cannot be anybody's job, that some one with special fitness must do it, or else some one must be trained to handle it.

Three Forms of Publicity

There are certain well-defined groups who must be interested in the work and future of the hospital. A few will suggest others. There are the city officials, the chamber of commerce, the physicians and surgeons of the community whose patients are desired, young women who may become nurses, newspaper men and women, fraternal orders, women's clubs, medical and hospital publications, former patients, young people who later will be influential in the affairs of the community, foreign-speaking people, ministers, church people as such, organizations within the church, boy scouts, camp fire girls, public school children, and the public at large. In addition are those people of wealth in the community whose financial help must be sought at times.

Generally speaking, there are three forms of publicity. These are the printed message, the spoken word, and the type-written communication. Each of these has a multitude of sub-divisions and adaptations, and each has its own particular merit for specific purposes. For instance, the printed message can go everywhere and reach all classes. It enters closed doors and delivers its content persistently in public and in private. It proclaims itself patiently in spite of opposition and argues convincingly and with courtesy. It is not laid aside by illness. It needs no vacation and it lives long on little. It makes many converts.

On the other hand, the spoken word has the advantage of personal contact. The speaker looks into the faces of those to whom he delivers his message. He can tell whether or not he is getting his message across. He is right there on the spot to answer any questions that may arise. Moreover, he is able to appraise his audience before beginning to speak to them and thus be sure he is shaping his message aright for the particular group that are to hear it.

With the use of the type-written communication still closer intimacy is possible. There is opportunity to go into minute detail concerning a particular phase of hospital work that is of special interest to the person for whom the letter is being written.

All Forms Have Their Uses

But these three methods are not to be compared with each other for the purpose of disparaging any one of them. In their practical use as vehicles for publicity they supplement each other. One is used where the others would not be practical. Or two are used where the third would not meet the situation adequately.

With some of these things in mind it is easier to formulate the purpose of the publicity to be used. It may be to keep the public informed and to develop a background of interest. It may be to secure patients or workers. It may be to secure financial aid or supplies. Whatever it is, the analysis made and the study of the results, together with the possible uses of the material, give a basis for working out a publicity campaign of interpretation and education.

It should be borne in mind that not everything can be done at once. It takes time to develop anything that is worth while and enduring. And publicity for a hospital should not be spasmodic. A persistent campaign of publicity such as is carried on by the average successful business house would be as effective and is as essential for a hospital as for a business house. Therefore utmost care must be taken every step of the way. This does not mean that one should be so conservative as not to begin any publicity until the whole subject is mastered. On the contrary, some forms of publicity should be undertaken at once—only so

much should not be started that what is done cannot be done well.

Preliminary to the detailed discussion of the several forms of hospital publicity mentioned, a few concrete suggestions may not be amiss. For they indicate somewhat the carefulness that is necessary. For nothing reacts so disastrously as publicity that is not true to the facts and which in any way seems to misrepresent that for which it stands forth as an advocate.

Some Definite Suggestions

1. Train someone to do your publicity and give him an opportunity to do it.
2. Always use the full corporate name of your institution. Thousands of dollars left in wills have failed to reach the institution for which they were intended because of the testator's ignorance at this point.
3. Visit automobile, electric and food shows and the like in order to get up-to-date printed matter for suggestions.
4. Study the advertising in the magazines and in your local paper.
5. Get a newspaper man or an advertising expert interested and make him a member of your board of directors or trustees. Then take his advice and give him something to do.
6. Make every patient a booster.
7. Make definite propositions as to what definite sums of money will do.
8. Remember that cheap printing is expensive.
9. Keep in mind the fact that leaflets are of no use unless in the hands of the people for whom prepared. Study distribution.
10. Put some other hospitals on your mailing list and have them put you on theirs, so as to be able to see what others are doing in the way of printed matter.
11. Never hesitate to let the public know the purpose of your institution, how it is run, what it costs to run it, how it is supported, etc.
12. Stories of actual experience have the strongest appeal.
13. Study advertising for endowments, annuities and legacies.
14. The hospital's reputation is an important factor. Let it once acquire a reputation for indifference to the needs of the poor, and appeals, however skillfully made, will bring ever-diminishing results.
15. An attractive letter-head which is carefully thought out and well printed is a constant medium of publicity.

The Hospital's Opportunity

The hospitals of the United States are rendering the public a service that is little dreamed of by most persons. Day after day they pass the hospital building, which to them is a cold, forbidding institution to be shunned as the plague. They have no vision of the ceaseless ministry that goes on behind those walls. They know nothing of the skillful surgeon who is operating to give added years to some sufferer. They have not heard of the physician who battles with death through the night in order that a life may be spared. The busy hours of the nurses mean nothing to them. It is just a hospital.

How different it will be when we make known the story of the multitudes who have never heard it told. The hospital walls will blaze with glory then. "Where cross the crowded ways of life" men and women will be singing the praise of *our hospital.* Race, color and creed will fade away into insignificance before the recognition of the wonderful service being rendered to "just plain folks."

DR. YOUNG TO HEAD HOSPITAL AT SYRACUSE UNIVERSITY

Dr. Charles H. Young, superintendent of the Presbyterian Hospital of New York City, has been elected head of the Hospital of the Good Shepherd, Syracuse University. Dr. Young was graduated from the Maine Eye and Ear Infirmary, Portland, Me., in 1906, after having completed the course at Tufts Medical College, Medford, Mass.

Dr. Young assumed his duties on March 22, relieving Dr. Herman G. Weiskotten, dean of the college of medicine at Syracuse University, who was acting head of the hospital in place of Miss Nellie R. Hamill, resigned, who has been superintendent for the past nine years.

During the World War, Dr. Young was chief of hospitalization base section No. 3. He had charge, under the chief surgeon, of all U. S. hospital construction, organization and management in Great Britain for eight months before the end of the year, with 25,000 beds under construction.

The new superintendent of the Good Shepherd has a wide range of interests in New York City, being listed as a director of the New York Out-Patients' clinic, the New York Social Service Association and the Society for the Suppression of Vice. He is a Rotarian, a member of the State Charities Aid Association, the American Hospital Association, the American Public Health Association, the American Reserve Officers' Association, the Harvey Society, a fellow of the New York Academy of Medicine and a lieutenant-colonel in the medical officers' reserve corps of the army.

$1,500,000 HOME AND SCHOOL FOR MOUNT SINAI NURSES

Plans have been made for a $1,500,000 training school and home for nurses at Mt. Sinai Hospital, New York, it has been announced. The new structure will be the eighteenth building maintained and supervised by the institution. Half of the cost has been promised by the trustees.

The new school will accommodate 400 nurses, as against only 220 who are housed in the present building on Madison Avenue. It will be built on a plot 100 by 125 feet. Mrs. Otto H. Kahn gave the hospital an adjoining lot on Ninety-ninth Street, near Fifth Avenue, to form part of the plot.

THE DESIGN OF NEUROPSYCHIATRIC HOSPITALS FOR WORLD WAR VETERANS

By F. CHARLES STARR, in Charge of Veteran's Hospitals Construction Service, Quartermaster Corps, U. S. Army, Washington, D. C.

ONE of the most difficult problems facing the government at the end of the World War was to provide suitable hospital facilities for veterans suffering with mental diseases. The hardships, deprivations and horrors of war unbalanced many a man's mind, some to a greater, some to a lesser degree, but fortunately in the majority of cases not beyond permanent recovery with proper care and treatment. The difficulty was to provide such care and treatment. By using existing permanent, as well as many temporary, general hospitals, the general medical and surgical and indeed the large number of tuberculous cases, were well taken care of, but for mental cases sufficient hospital accommodations simply did not exist. All available hospitals equipped for caring for such patients were immediately utilized to their fullest capacity, but the majority of cases had to be cared for in some form of contract or private hospital. Some of these were excellent, but too many were far from it, though the best available.

On April 20, 1922, Congress passed the so-called second Langley bill providing $17,000,000 for hospital facilities, and placed the responsibility of spending this money with the director of the U. S. Veterans' Bureau. A stipulation in the bill provided, however, that not to exceed the sum of three per cent of the cost of the hospitals could be used for their design and supervision of construction. Only by using existing government agencies as much as possible could this be accomplished, so the War and Navy Departments were called upon for such assistance. A brief description of the sites selected and the hospitals as planned and being built by the Construction Service, Quartermaster Corps of the Army, follows:

Description of Sites

For administrative purposes in the Veterans' Bureau, the United States was divided into fourteen districts, based on the military population, and as near as possible it was desired that each district be provided with suitable hospital accommodations. Since the necessary facilities could be provided from the funds available only with the strictest economy, it was endeavored to obtain as many sites as possible without expense to the government, and the majority were so obtained. Hundreds of sites were considered and dozens carefully examined. To be satisfactory, sites should be near the center of the population to be served, have suitable railroad connections, be preferably on main highways, be of sufficient acreage for expansion with possibilities for occupational therapy, have satisfactory building sites with proper satisfactory sewage disposal, and be near local markets. Sites with all these requisites were manifestly not easy to obtain and were secured only after extended investigation.

The citizens of Northampton, Mass., furnished the first site. It is located about two miles north of the city on a main highway and a branch of the New York, New Haven and Hartford railroad.

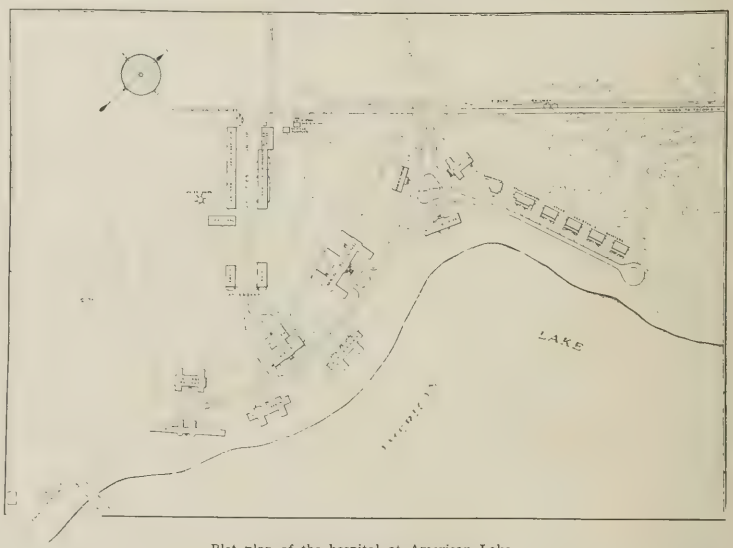
Birds'-eye view of the U. S. Veteran's Hospital at Camp Custer, Mich.

Birds'-eye view of the U. S. Veterans' Hospital at American Lake, Wash.

It contains 282 acres and has an unusually attractive building site on a hill overlooking the Connecticut River valley to the south. Connections are made to the city water and sewer systems, and favorable rates are obtained from the local electric utility company. A spur track extends into the hospital grounds and so facilitates transportation. A 435 bed neuropsychiatric hospital is being erected.

For Ohio and Indiana a portion of the government-owned Camp Sherman site at Chillicothe, Ohio, was set aside for a hospital. Besides being an attractive location for a hospital, it is on a state highway, with a railroad spur, and can connect with existing sewer, water and light lines on the reservation. Excellent opportunity will be provided for farming and gardening. A 435 bed neuropsychiatric hospital is being erected.

At Knoxville, Iowa, an existing state institution was purchased. It has accommodations for some 229 patients which, with additions, will provide for about 400 patients. The reservation contains 336 acres, the land being very fertile with unusual opportunities for training in farming and gardening in connection with the hospital. The site is on the outskirts of the town and has a railroad spur on the property.



Plot plan of the hospital at American Lake.

To serve the northwest, a neuropsychiatric hospital of 260 beds is being built on the government-owned reservation of Camp Lewis, near Tacoma, Wash. Some 400 acres have been set aside for the purpose in a fir-covered section on the west shore of American Lake, a particularly beautiful spot. A main highway runs near the site, the main line of the Northern Pa-

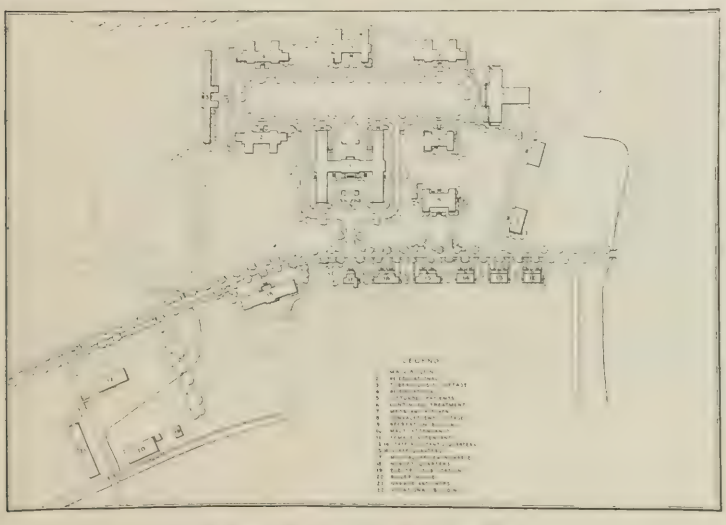
Main building, U. S. Veterans' Hospital, American Lake.

cific Railroad is within two miles, and an electric line connects Tacoma with the reservation. Water of unusual purity is available from the existing Camp Lewis system and electric service is obtainable at very favorable rates.

The middle-northern states will be served by a 520 bed neuropsychiatric hospital on the government-owned Camp Custer reservation, ten miles from Battle Creek, Mich. An attractive section of the camp overlooking the valley to the west is set aside for the hospital. Connections to the camp water, sewer and electric systems can be made. A state highway passes near the site and a spur from the Michigan Central railroad is now on the reservation.

Two more neuropsychiatric hospitals, one of 200 beds at St. Cloud, Minn., and one of 250 beds at Gulfport, Miss., are being designed and built for the Veterans' Bureau by the Bureau of Yards and Docks, Navy Department.

Main building, U. S. Veterans' Hospital at Chillicothe, Ohio.

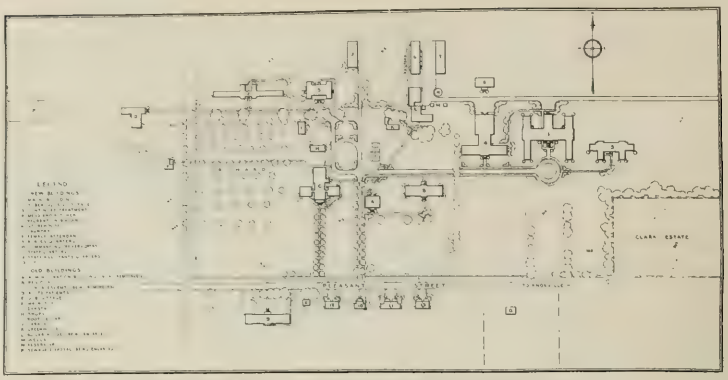


Plot plan of the hospital at Chillicothe, Ohio.

The program laid down was to provide modern fireproof hospitals with the requisite number of beds, complete with all mechanical equipment and all outside utilities such as roads, walks, sewers, heating plants, water and light lines, of an economical design, void of all unnecessary adornment, and all in the shortest possible time. Just as soon as sites were selected therefor,

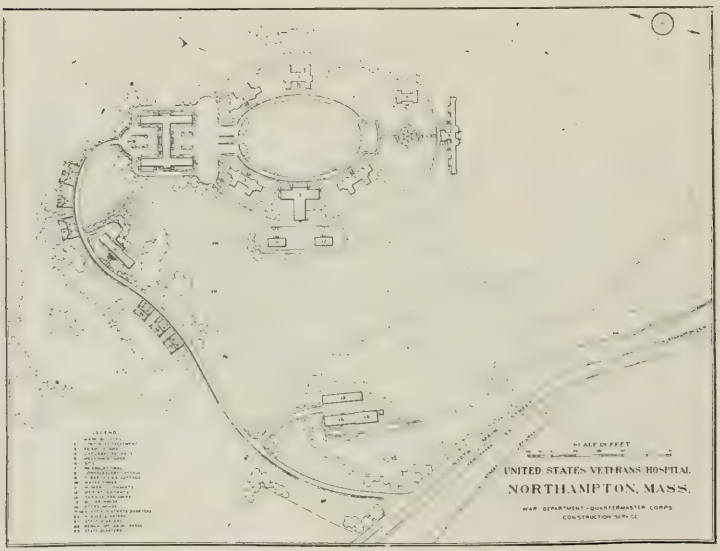
Birds'-eye view of the Chillicothe hospital.

designing was immediately begun, and pushed to completion so that by the end of February, 1923, the plans of all five hospitals were completed, bids obtained and contracts let, with early dates for occupancy. The hospital at Northampton, Mass., is to be ready in February, 1924; Chillicothe, Ohio, in December, 1923; Knoxville, Iowa, in August, 1923;



Plot plan of the U. S. Veterans' Hospital at Knoxville, Iowa.

Birds'-eye view of the Knoxville institution.

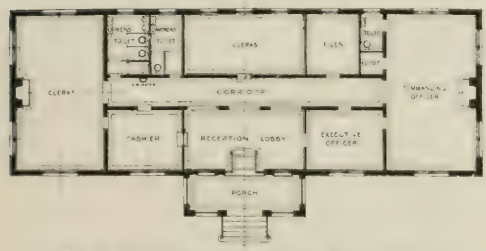


Plot plan of the U. S. Veterans' Hospital at Northampton, Mass.

American Lake, Wash., in October, 1923; and Camp Custer, Mich., in July, 1924.

In order that these hospitals would meet the special needs of the men to be treated in the very best manner possible, intensive study was given every phase of the requirements and the best medical specialists consulted. In planning the hospitals not only the grouping of the buildings, but the arrangement of rooms was so worked out as to function best toward the end of bringing patients back to normal condition as quickly as possible. They are

Plot plan of the U. S. Veterans' Hospital at Camp Custer, Mich.

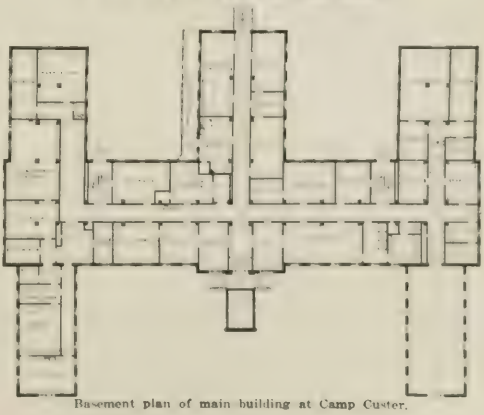


Plan of administration building, Camp Custer hospital.

Mess and kitchen plans at Camp Custer.

First and second floor plans of the recreation building at Camp Custer.

First floor plan of the nurses' quarters at Camp Custer.

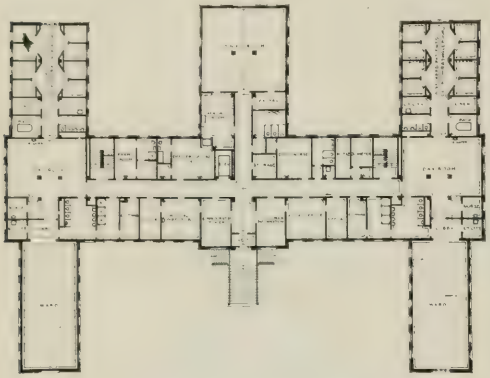


Basement plan of main building at Camp Custer.

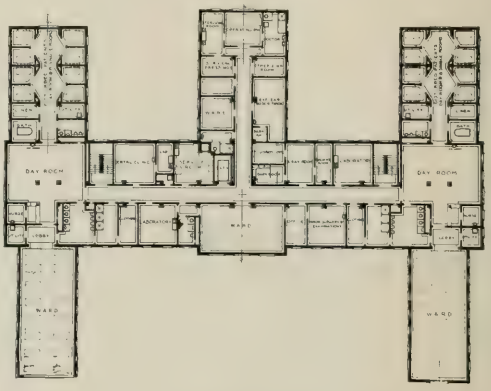
not asylums but hospitals, where men with diseased or unbalanced minds can be treated sympathetically, yet scientifically, and nursed back to health just as for any other disease.

All the hospitals are located in the country with plenty of land, free from the disturbing influences of the city, yet near enough for economical administration. Each is a complete self-contained institution with all auxiliary buildings and utilities laid out with plenty of breathing space; this requirement added to the cost of the projects, as compared with city institutions, but was considered essential.

In general the buildings are grouped according to their functions. The officers' quarters and nurses' quarters are near enough to the hospital proper for convenience, but remote enough for privacy. The business of the institution usually is carried on in a separate building near the entrance to the grounds, while the utility group is located at one side. The patients are all received at the main building receiving ward, where they



First floor plan of main building, Camp Custer.

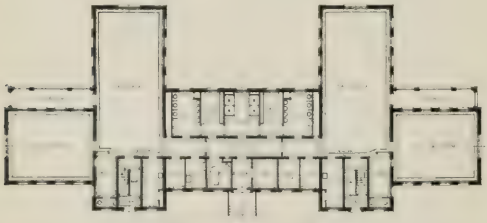


Second floor plan of main building, Camp Custer.

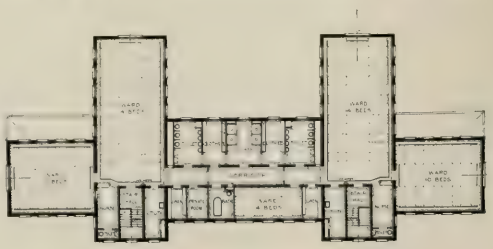
Plan of first floor, disturbed patients' building, Camp Custer.

Floor plan of tuberculosis building, Camp Custer.

First and second floor plans of convalescent building, Camp Custer.



Plan of first floor, continued treatment building, Camp Custer.



Plan of second floor, continued treatment building, Camp Custer.

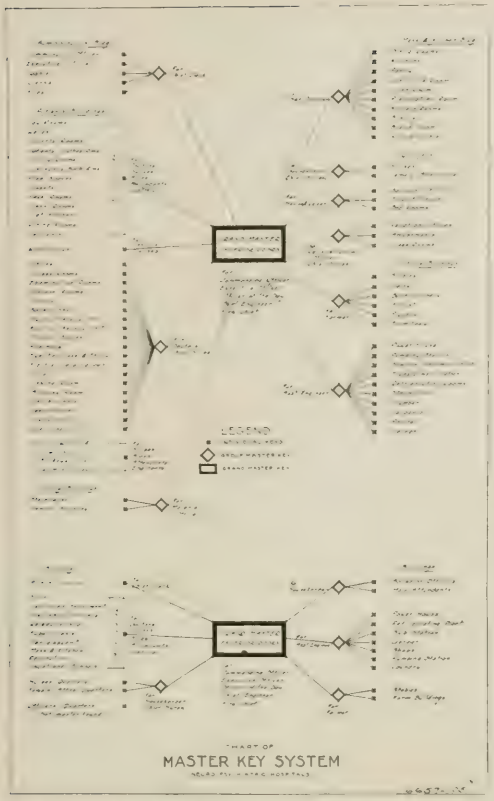


Chart of master key system employed in neuropsychiatric hospitals of the U. S. Veterans' Bureau.

are examined and histories obtained. Here they are kept for observation for a period, the acutely ill remaining longer. On leaving the receiving ward, chronic cases are placed in a continued treatment building, while the more promising cases are transferred to a re-educational building. Later, as the patient progresses, he is assigned to a convalescent cottage, prior to his discharge from the hospital. A separate building is provided for tuberculous patients, while the violent or particularly disturbed cases are cared for in a disturbed patients' building. Always considering the patient an ill man, he is classified and assigned the group that his particular condition warrants, where he may have the treatment, associations, privileges and occupation best suited for him.

General Plan of Hospitals

Since vocational training plays a large part in the treatment of mental diseases, liberal accommodations are provided for this work. Clinics are all located in the main building, ample provision being made for eye, ear, nose and throat, metabolimeter, x-ray, dental and operating suites, as well as bacteriological, pathological and biological laboratories. The hydro-therapeutic suite is particularly complete for these patients. Special attention has been given to insure proper food service in the arrangement of kitchens and dining rooms for both bed and ambulant patients. In general all patients are provided with both day rooms and night wards, to prevent crowding and to allow as much freedom and comfort as possible; in fact, this has been done to an unusual extent.

Details of Construction

In the detail design of the structures simplicity was sought, not only for its own merit, but because of limited funds which demanded it. Strictly fireproof patient buildings are provided, none over two stories in height. The buildings are of reinforced concrete columns and floors, with brick walls and slate roofs, except at American Lake where the walls are tile stuccoed, with Spanish tile roofs. Special attention was given to location of ample stairways for exit, there being always at least two possible exits. At least 800 cubic feet of air was allowed per patient. Metal trim is used extensively as are flush doors and coved corners. Ward floors and corridors are of lineoleum or hard mastic, and toilets of tile. Plumbing fixtures were specially selected for the type of patients, serviceable and sanitary.

Particular attention was given to prevent any patients from getting scalded not only by using a thermostatic mixing valve which regulates the temperature of the water within two degrees and automatically shuts it off if it gets too hot, but also by another valve, electrically controlled, which independently shuts off the water if too hot. Water treatment being an important part of the treatment of neuropsychiatric patients, continuous baths and showers are used extensively.

Nooks and corners where patients could hide were particularly avoided and special care was given to protect disturbed patients from injuring themselves or the equipment. Night floor lights and non-glare ceiling lights were provided in all wards, and special flush ceiling lights in disturbed patient rooms. Particular attention was given to locks and the system of master-keying in order that proper control and protection would be obtained, to ensure every one having a key that should have one, and none that should not.

Although these hospitals are complete institutions, in the country rather than in city blocks, composed of comparatively small buildings covering considerable areas, with all auxiliary fea-

tures such as railroad spurs, roads, heating plants and distribution mains, storehouses, refrigeration plants, laundries, garages, and officers', nurses' and attendants' living quarters, extended water mains with usually pumping plants and sewage treatment stations, also considerable grading and improvement to grounds, with buildings of fireproof construction, with complete modern equipment, and unusually liberal space allowance per patient, they are being constructed for about $4,000 per bed complete, in spite of the high cost of labor and material.

Hospital designing being a progressive art, a plan is no sooner finished than it is realized that it could be improved in some particular. The problem of providing neuropsychiatric hospitals for World War veterans however was to design simple, practical, fireproof institutions, which would function efficiently and to get them built quickly. Prolonged discussion on relative merits of certain features was impossible, so all requirements had to be assembled promptly, intensive study made thereon, and plans rushed, economy of design always being an important factor. The neuropsychiatric hospitals now being built were designed with the particular needs of the patients to be treated always in mind, however, and it is hoped that they will amply serve those disabled veterans who so manifestly deserve the best their country can give them.

THE STORY OF THE CLEVELAND HOSPITAL COUNCIL*

By HOWELL WRIGHT, Attorney-at-Law, Director of the Cleveland Hospital Council, Cleveland.

Twenty Cleveland hospitals are organized in the Cleveland Hospital Council, an incorporated association for mutual benefit. The hospitals have a common obligation, according to agreement, to assist each other by coordination of action and by the development of the most efficient methods in the performance of their functions. The Council's purposes include the simplification of problems of management, prevention of duplicated effort, elimination of waste, reduction of costs, improvement of services, education of the public, initiation and approval of wise local and state legislation, and other similar activities which will promote the common interests of its members.

"CONCERTED action for common benefits" is the story of the Cleveland Hospital Council. The accomplishments of seven years are not the result of the wielding of autocratic power or the activities of any one person. They are the result of the best cooperative efforts of many capable hospital trustees, superintendents and other persons genuinely interested in the development and advancement of community hospital service.

This agency, beginning as an informal voluntary association and later incorporated, first served its membership from a small, single office with a staff of two persons. Today, it occupies 2,000 square feet of office space and has a paid staff of seventeen persons. Its first budget was $6,000. The 1923 budget is $46,745. Appropriations to carry on its activities are provided by the Cleveland Community Fund.

Twenty hospitals (two tax-supported and eighteen public, charitable hospitals) constitute the membership. Each hospital appoints three representatives—usually a trustee, the executive officer and a visiting staff member. These, at the annual meeting, elect the board of trustees and officers of the Hospital Council. The members meet at least four times a year but the board of trustees, which is largely responsible for the conduct of affairs, meets at least once a month. Use is made of special committees for advisory purposes on such matters as legislation, collections, purchasing and standards and dispensaries.

The Hospital Council from its very beginning has been democratic and representative in character. Its governing body of trustees is vested only with limited powers. No right of supervision or control over the constituent member hospitals exists. The Council can do only what the members agree to do and authorize to be done by their agent. Even then, its acts are not necessarily binding upon the member hospitals for each member is controlled by its own board of trustees. Neither by expression or implication does there exist any centralized control.

The Hospital Council, with its represented hospitals, may be likened to certain voluntary or incorporated associations of large business corporations. In general, its object is to preserve and promote the common interests of the constituent members. It is agreed that hospitals have a common obligation to assist each other

*The first of a series of articles on the history and activities of Cleveland Hospital Council. The second article will deal with the Hospital and Health Survey, and the third with the Council's purchasing service and the principles of cooperative centralized buying.

by coordination of action and development of the most efficient methods in the performance of their functions, thereby simplifying the problems of management, preventing duplication of effort, eliminating waste, reducing costs and improving service rendered; to give the public an intelligent accounting of their stewardship; to educate the public to a substantial degree of willingness to give moral and financial support; to initiate and favor wise local and state legislation and to oppose all legislation inimicable to their field of work. While the chief object of business concerns so associated is to increase profits, the aim of the hospitals, so associated in a common organization, is to increase and improve the service rendered to the community.

The Council's Program

In 1916, the members of the Hospital Council asked themselves this question: What can the hospitals do through a central organization to increase their own efficiency to the end of better meeting Cleveland's hospital needs? The answer is found in the adoption of the following constructive program which, in the main, has been adhered to throughout:

Adopt business economies found wise locally or elsewhere, such as the storeroom system of control and distribution of supplies and cooperative buying.

Adopt uniform accounting systems; uniform, at least, in the essential particulars of modern hospital accounting, which will make it possible at all times to give the public an intelligent statement of the work done and the unit cost of the same.

Promote the feeling of responsibility on the part of the hospitals to know and to better the social factors influencing their patients as individuals and members of the community.

Keep informed, through the central organization, of all legal matters and all legislation, local or state, affecting the work of any one or all of the hospitals in the Council.

Cooperate in matters of medical and nursing education. Substitute cooperation for competition in securing interns and in the work of securing and training of nurses.

Cooperate in urging the municipal, county and state authorities to assume their full responsibilities toward the sick and for the removal of conditions which are responsible for sickness and injury. Treatment of cases of preventable sickness and accidents now forms a large part of the work of the hospitals. Reduction of these will not only save suffering, but the cost of the care.

Cooperate with the city and state divisions of health in meeting obligations toward the public health.

Consider the needs of Cleveland as a whole in the planning of new hospital and dispensary facilities; their relation to existing facilities; their weaknesses and strong points; their concentration and their distribution.

Make the Hospital Council the center of hospital coordination and progress in Cleveland.

Before taking up the larger problems involved in modern hospital work, it was deemed advisable to study financial questions. Especial consideration was given to rates and charges made for the various classes of hospital service, as well as to existing systems of accounting. It was early agreed that hospitals should not rent private rooms at a rate less than their full maintenance cost; that hospitals should not rent their beds for cases for which industrial or other corporations were morally and by the Ohio laws responsible, at less than cost. "Hospital cost for service rendered" was adopted as a policy.

Prior to this time, it is doubtful if the officials in any one hospital knew the rates for service charged by others. In a sense, at least, it was considered as secret information. There was competition between some of the hospitals to secure industrial accident work. Hospitals sometimes actually bid against each other for such work, without common knowledge of the fact. A study of per capita costs and rates followed, with the result that private room rates and ward rates have gradually been increased in relation to the cost, and a large saving has accrued to the charitable funds of the community. In dollars and cents this saving has amounted to over a half a million dollars.

Care of Industrial Accident Patients

For several years, the Hospital Council struggled to secure the adoption of the "cost" principle by the state industrial commission. This involved many weary steps. It was necessary to secure the enactment of legislation removing the maximum amount which might be paid by the state for medical and hospital care of a single case and also the enactment of a law creating the state hospital bureau with authority to secure uniform facts as to hospital costs throughout the state. Articles on the subject of doing "charity work" for the state had to be written and published. Public hearings were necessary. The final step was taken July 1, 1920. At the request of the industrial commission, the Hospital Council recommended a plan whereby the hospitals might be compensated by the state on a just basis for the care of injured workmen. In the conduct of the case before the industrial commission and in securing the cooperation of hospitals throughout the state, the secretary of the Ohio Hospital Association joined and rendered most effective service. The rules governing hospital charges, as adopted by the commission, give recognition to the "cost" principle and practically put an end to the day when Ohio hospitals must do "charity work" for the state. In substance, the new plan means an individual agreement between the commission and the individual hospital on the basis of cost, with a maximum rate of $6.00 per day.

The industrial commission deserves great credit

for this progressive action which has attracted the attention of other hospital groups, both state and national. The rules governing this plan are relatively simple.

Within a few days after the first of each calendar year, each hospital, through its proper official, as a basis for entering into an agreement with the industrial commission of Ohio, formally advises that body of its patient day cost for the previous year and certifies that this statement agrees with the report submitted by the hospital to the state department of health, as required by law. It is further certified that the patient day cost does not include certain capital charges, but does include all expense of operating room service, anesthetic when administered by an individual in the employ of the hospital, drugs, medicines, dressings, board of special nurse, ordinary nursing service, x-ray service, and all service rendered by hospital interns and orderlies.

In performance of its part of the agreement, the industrial commission agrees to pay each hospital the patient day cost stated for the previous year for hospital, medical and nursing care rendered individuals protected under the provisions of the workmen's compensation act and recognized by the industrial commission as a legitimate expense against that fund.

As the result of several years' experience, rules and regulations governing hospital contracts have been worked out in detail and contain important definitions and instructions. These rules give recognition to the principle of arbitration in that disputed cases arising out of any contract may be referred to a committee, representing the industrial commission, the department of health and the hospitals of the state. Appeal is permitted from the decision of this committee to the industrial commission. Any organized group of hospitals, wishing to take up such questions in any other state, would do well to familiarize themselves with the results of the Ohio experience.

A conservative estimate of the financial benefit that has resulted to the hospitals of the state—to say nothing of the benefit to the injured workmen—is at least three quarters of a million dollars a year. To the hospitals in Cleveland alone this has meant at least $150,000 annually.

Patient and Financial Accounting

One of the most important of the financial problems considered was that of uniform reporting and accounting. The adoption of the maintenance cost principle fully emphasized the need of this uniformity. It was found that no two hospitals had a common system of reporting the number of patients treated in either hospital or dispensary or the number of days of treatment given, and that there was no common method of figuring the cost of the service rendered. It was agreed that a uniform accounting system, uniform at least in the essential particulars of modern hospital accounting, ought to be worked out and a uniform report blank adopted which would give the public an intelligent statement of the work done by each hospital each fiscal year and the unit cost of the same. There were many difficulties to overcome, but such a blank has been finally worked out and adopted. It became effective January 1, 1917.

The report blank was divided into two parts—first, "Work Done"; second, "Cost of Work Done." Careful instructions for its use were given. The hospital patient was properly defined for purposes of reporting and was separated from the out-patient and all other persons not properly coming within the classification. Instructions were given for taking the daily census and for figuring the number of days of treatment given. Most important of all, however, was the grouping of hospital patients as follows:

1. Pay patients, or those for whom at least the cost of their care is paid.
2. Part-pay patients, or those for whom only part of the cost of their care is paid.
3. Free patients, or those for whose care nothing is paid.

It was specified that patients, whose bills for hospital services were uncollectable, should not be accounted for as "free patients." Bills for such service were accounted for under "Uncollectable Bills for Hospital services, charged off." Dispensary patients and emergency or accident cases remaining in the hospital less than twenty-four hours were reported separately and not included under these headings. Under these three headings, each hospital reported on the basis of the calendar year as the fiscal year, the total number of patients, the total number of days of treatment given to each group and the amount received for the care of pay patients and part-pay patients. There was also a separate item "public charges" to be used by municipal hospitals or other public hospitals caring for patients accepted by the county, city or township. This grouping was simple and easily adaptable to the accounting system of any hospital.

In the financial report, hospital income was classified under "operating earnings," "contributions," and "capital income." Expenditures were classified under "operating expenses" and "capital expenditures." While the blank did not contain the often innumerable headings for distribution and detailed itemization of all expenditures, it sought to obtain the all-important items: (1) total operating expenses, and (2) average daily per cap-

ita cost per patient. Careful instructions were given for figuring the total operating cost, the average daily per capita cost per hospital patient, as well as the average cost per dispensary visit. All-important in this connection were the figures, "total number of days of treatment given" and "total number of dispensary visits." These forms were used for a number of years in reporting direct to the Hospital Council. The classification of patients into "pay," "part-pay" and "free" groups has been adopted by other organizations and the essentially important features of these forms have been adopted by the state hospital bureau, to which all hospitals are now required by law to report. This plan of uniform hospital reporting proved to be of value not only to the hospitals but also to hospital contributors and to the public at large. It has been enlarged and improved by the welfare federation, to which all hospitals benefiting from the community fund now (since 1919) report monthly and annually and also submit annual budgets.

Through its legislative committee, an active interest has been taken by this organization in legislation. A paragraph from the 1917 report sets forth the principles which have governed its legislative activities and relations with local and state governmental departments:—

Modern hospitals are factors in public health work. As such, they are maintained by tax collected funds or by private philanthropy. While they exist primarily to prevent disease and to take care of the sick, they have certain other important functions. They are expected to afford opportunities for scientific study and research and to help educate and train both physicians and nurses. Along all of these lines they are expected to render satisfactory service to the public. Whether public or private, they are subject to certain rules and regulations and are bound by laws of supervision and control at the hands of the state. While they have certain obligations to meet, they have interests in common to protect. To meet these obligations and protect these interests, they have been slow to organize. In some states where there has been an opportunity to secure state aid, they have been well organized for this purpose. But it may be safely said that they have been lamentably weak in organizing to keep their superintendents and controlling officers informed through a central office of all legal matters and particularly legislation, local or state, affecting their financial interests and their public health responsibilities. This is a serious situation.

In 1917, the Hospital Council was requested by Governor James M. Cox to make a study of medical and hospital legislation in the state. An extensive survey was made and report published, with legislative recommendations. Several important measures were enacted as the result of this report—one centralizing all state authority as regards hospitals in the state department of health; the other creating a bureau of hospitals in that department with authority to define and classify hospitals and dispensaries and to require them to register and make annual reports, as well as authority to license maternity hospitals. This legislation, so recommended, was based upon the principle which the Hospital Council has steadily advocated, namely: That the state should exercise a reasonable supervision over hospitals and dispensaries as public health organizations. State control it has always opposed.

A third measure of consequence, as recommended in the report to the governor and enacted into law after a lively legislative battle, definitely legalized the administering of anesthetics by a registered nurse under the direction of, and in the immediate presence of, a duly licensed and qualified physician. This proposal was based upon an exhaustive study of laws, official opinions and other data and information concerning medical practice and the administration of anesthetics obtained in all of the states in the union. Its passage was fought by a small clique of professional anesthetists interested primarily in "medical commercialism," some of whom have since tried to have the law repealed but without success. The nurse anesthetist is here to stay.

Other proposals recommended by the Hospital Council and enacted into law, include: removal of the $200 limit paid by the industrial commission in any single case for complete medical and hospital attention; an act providing for public aid to private hospitals; an act authorizing corporations to make contributions to community funds and other charitable organizations. Effective opposition has been voiced to numerous legislative proposals believed to be inconsistent with the interests of the public. Every public health measure advocated by the Council has been enacted into law while every measure opposed has failed.

SOCIAL WORKERS ANNOUNCE PROGRAM

The American Association of Hospital Social Workers, which will hold its semi-annual meeting, May 16-23, at Washington, D. C., in connection with the National Conference on Social Work, has prepared its preliminary program. Miss M. Antoinette Cannon, president of the organization, at the opening morning session will give a review and forecast of hospital social service. The afternoon session of the first day will be given over to business affairs, with election of officers and district reports.

Other speakers who have been scheduled to appear are Miss Ruth V. Emerson of the Boston Dispensary; Miss Janet T. Thornton of the Committee on Dispensary Development, New York; Miss Edith Baker of Barnes Hospital, St. Louis; Dr. Frankwood W. Williams, director of the National Committee for Mental Hygiene; Dr. William Healey, director of the Judge Baker Foundation, Boston.

A report of a special study in New York will be made by Miss N. F. Cummings, secretary of the North Atlantic District; and a similar report of Boston by Miss Marie L. Donohoe, chief social worker, Boston State Hospital.

A trip to Baltimore will be taken on Wednesday.

THE STATE HOSPITAL AND ITS PHYSICAL PLANT*

In a discussion of the relative merits of plans for a state hospital plant, so far as the daily life of the patients is affected their attitude will be a correct guide. The place to study institutional plans is among the patients. The behavior of the insane is not always or entirely due to mental affliction, but much of it is chargeable to old human nature. Revolt against injustice in the institution is too often accepted as a manifestation of insanity. One of the most notorious injustices practiced upon the insane is to be found in the character of the housing to which many of them have been consigned. The institution for nervous and mental cases, of all institutions for the sick should be planned about the patient.

ADAPTABILITY to the patient has been the keynote of general hospital planning and construction for a number of years. To make the institution serve the needs, comforts and well being of the patient has been the paramount object of architects, builders and administrators.

The general hospital has been recognizing how great a thing its physical plant is in the life of its patients, and architects have created the specialty of hospital planning and building. There are publications devoted to this particular subject. Administrators are putting their best thought into plant arrangement and economies.

Among state hospitals, adaptability to the patient has had slighted consideration. The effort too often has been to adapt the patient to the plant. Yet it is far more important that the state hospital plant be adapted to the inmate, because it is to become the home of many of those who enter its doors. Too little regard has been shown for permanency of residence, one of the big factors in state hospital life. The institution for nervous and mental cases, of all institutions for the sick and helpless, should be planned and built about the patient; the patient should not be warped into it, whether he fits it or not.

No Specialty in State Hospital Planning

For the plant to fit the patient, supply his wants and contribute to his comforts, it is not necessary that it be of any particular type or school of architecture. The congregate type can be made to serve the patient; the cottage type possibly serves him better with less effort, but, in building either type, the state has not been disposed to recognize the influence that the plant itself exerts upon the patient's well being.

Too much has been left to the architect, the politician and the gaudy vanity of the locality. There has been no specialty in state hospital architecture. Few architects have even attempted to study its architectural needs. Usually the state has an architect who is either a politician or receives his appointment through political influence, and he gets little encouragement from the state to delve into the special problems of the hospital. His tenure is likely to be short. When there is no state architect, the situation is even worse. In either event it is not often that an architect is selected who has even specialized in general hospital planning. Whether it be of the congregate or the cottage type, the state hospital is a community, say of 1,000 patients and 200 or 300 employes, or perhaps 3,000 patients and 500 employes. City planning which is so vigorously studied now by American cities for the purpose of insuring proper development along harmonious and sane lines should appeal to the state hospital community; the need for state hospital planning is just as great and of the same general character. If the people of a normal community plan their business and public buildings and their homes so that the effect will be soothing and satisfying, how much more important is it that the home of a people of distraught mind should be given attention, to eliminate whatever may irritate and to create that which will make for pleasure and comfort of existence.

To work on, state hospital planners have not many ideas. As has been mentioned, there are two types of institutional plant for this class of sick, the congregate and the cottage. All state hospitals that are more than fifteen or twenty years of age are either wholly congregate or have developed about a congregate nucleus. In between the two there is a modification in which the cottage as a unit is large, three stories high and housing as many as 300 patients. Some states have adopted the simplest form of cottage, a small unit of one story, located flat on the ground without basement or attic.

A study of better standards of care and treatment for the mentally afflicted can not ignore the factor of the physical plant. The plant must be economical in its operation, not only in the interest of the taxpayer but in the interest of the

*This is the third of a series of articles on state institutions for the mentally ill which is being prepared under the direction of a special committee of the editorial board of THE MODERN HOSPITAL, in cooperation with the National Committee for Mental Hygiene and Mr. A. L. Bowen, former superintendent of charities of the department of public welfare of the state of Illinois.

patient. What may be saved on the fuel bill, through modern boiler house and heat distribution systems, may be applied to recreation, to new equipment in the sick wards, or to placing an additional man on the staff, so with all savings which may be made through application of approved methods.

Many Economies at Expense of Patient

But the process of economizing must end where the patient's rights begin. A congregate type of plant may be more economical to operate so far as the budget is concerned, but if the cottage system is more conducive to the happiness, comfort, contentment and stability of the inmates, then its additional cost should not be permitted to stand in its way.

In considering maintenance and development costs, there is one good rule to follow—the patient. Let him be the guide. There is no danger that too much will be done for him. In the expenditure of the funds available, no matter for what special purpose, the first and last thought should be the patient. He may be there to stay. The superintendent, the employe on the ward, the medical man, are temporary. The personnel is entitled to thought. The state should provide for its employes adequate and pleasant quarters, removed from the scene of their daily labors, but the institution should not be laid out and constructed for the avowed purpose of making their labors easier, if, in so doing, something is taken from the meager benefits of the patient.

Need Not Discard Old Buildings

Too much must not be charged against the plant. Manifestly it is more pleasant to work in new and modern buildings, but the old and out-of-date may not seriously stand in the way of the truth seeker. It is no uncommon thing to hear a superintendent excuse the lethargy of his institution by the assertion that the plant is old and antiquated. "No one can do anything with it," he says. Such a superintendent would have some excuse if he had the most modern plant in the world, for he is simply hunting defense for his own incapacity to deal with the situation.

It is possible to transform an old building into a delightful place in which to live. The average congregate institution was well built, and its structure will permit of changes. Light may be let in; the population of its wards may be decreased; the walls may be decorated; corridors, day rooms, dormitories and single rooms may be nicely furnished. If the building is not safe but is too good to abandon, it is feasible to build cottages sufficient to absorb the population living above the second floor. Then the third, fourth and fifth floors may be converted into occupational classrooms, recreation centers, reading rooms, sewing rooms, and the like, to be occupied only during the day time by the more dependable patients. One of the best institutions in the writer's knowledge is of the congregate type, once the bane of a superintendent who could do nothing modern because the plant was so out of date. He made no effort. But another man was only handicapped; he overcame the handicaps and made a free and liberal use of the old building, removing the patients from the top floors and turning the abandoned living quarters into bee hives of daily activity.

It has been a theory that certain types of patients require certain types of plan and construction. There is no objection to the theory except that it renders an institution immobile and fixes it too rigidly in one mold—something it seems desirable to avoid.

Patients Are Best Guide

In the discussion of the relative merits of two or more types of plant plan, so far as the daily life of the patients is affected, a correct guide is their attitude. What do they seem to like? What contributes to their peace of mind? What irritates them and makes them difficult? We are prone not to think about this, notwithstanding the general concession that environment is a big factor, not only in precipitating the individual's affliction, but in shaping his conduct within the institution. Odors, light, ventilation, distance from mother earth or close communion with her, all are little things which may be very important in the patient's daily routine.

It is academic and almost futile for superintendents, architects and others to discuss congregate and cottage institutions, one story, two story, or three story cottages, large or small, and all other phases of the subject, because they will reach no unanimous decision. The place to study institutional plans and to learn what is best is among the patients. How many have ever experimented along this line? The writer can illustrate his meaning by reference to a vivid experience in his own service.

In all his travels among the insane he had not found anything worse than "Old Relief," as one immense cottage at a certain state hospital was known. It was the house in which the most difficult of the 1,500 males in that institution were kept under the severest discipline. It was sinister in aspect; great frowning porches along the front shut out the light; there was a high basement which smelled to heaven and in it were the dining

rooms; adjoining was the bath room. The floor was rough; tables were covered with tattered and torn oil cloth. There were no two chairs alike; some had backs, some had three legs, some had legs worn down by constant scraping on the floors. On the first floor were three wards, all crowded. The plastering was off. There were no chairs, only benches along the walls.

One ward contained active, fighting, destroying men; the next, a demented crowd, tricky and quarrelsome; and the third a disordered and decaying group, frequently naked. All of them were idle all of the time. Toilet arrangements were abominable. Above were three dormitories, the beds so close together that patients might roll from one side of the room to the other without touching the floor. The authorities explained that it was humiliating but it was the best that could be done.

It was decided to rebuild the house. It was gutted until only the walls remained. The top floor was made into one immense, light, airy dormitory. The first floor was divided into two wards instead of three. Hard wood was laid and polished. The walls were plastered. New and modern plumbing was installed with terrazzo floors; urinals and stools separated by partitions were placed in the toilet rooms. Porches were removed and light was let into both the basement and first floor. Enclosures were erected on the rear so that they did not interfere with light and ventilation. The walls were decorated; the stairs were made wide, open and nicely finished. The dining rooms became light, sweet and pleasant. New furniture was installed throughout. Meanwhile occupation had been found for a number of the agitated active men, either in shops, on the farms or in occupational therapy. When the new building was reoccupied, the transformation in conduct was remarkable. The place discarded its old evil reputation. Before, the men's conduct had conformed with the surroundings; when the surroundings were made human and good to look upon their conduct changed.

The behavior of the insane is not always or entirely due to mental affliction, but much of it is chargeable to old human nature. Revolt against injustice in the institution is too often accepted as a manifestation of insanity. One of the most notorious injustices practiced upon the insane is to be found in the character of the housing to which many of them have been consigned.

Standards in state hospitals must include this factor. It has a big place in the solution of the problem of care and treatment of nervous and mental diseases.

THE CLEVELAND COMMUNITY FUND*

By CHARLES E. ADAMS, General Chairman, Cleveland Community Fund, Cleveland, Ohio.

THE most conspicuous achievement in cooperative philanthropy and centrally planned social service work is represented by the Cleveland Community Fund, which, together with the Welfare Federation of Cleveland and the Federation of Jewish Charities, constitutes the famous Cleveland plan so widely copied elsewhere.

It would be wrong to assume that this tremendous undertaking now no longer an experiment, requiring over $4,000,000 in annual contributions and combining local agencies with an aggregate annual expense budget of about $8,000,000, came into existence without long and deliberate preliminary transition stages. In fact, the very strength of the present plan lies in its careful evolution.

It is interesting to note that the first example of cooperative giving and centralized planning in relation to philanthropic work was furnished by the Federation of Jewish Charities which is now in its twentieth year in Cleveland.

Early in the present century the Cleveland chamber of commerce found through a survey that the number of philanthropic agencies in Cleveland was rapidly increasing, and that the need for some form of wise direction of philanthropic expansion was indicated. There followed the creation by the chamber of commerce of the committee on benevolent associations which undertook on the one hand to endorse local philanthropic appeals found to be meritorious and, on the other hand, to advise the business public respecting those appeals found by the committee to be unjustified. The cooperation of the business public was secured to the extent that local agencies found the committee's endorsement almost indispensable to their success in soliciting funds for their work.

Under the procedure instituted by this committee, local benevolent associations appealing for funds to the general public of Cleveland submitted to the committee in due form their annual budgets and requested approval of these budgets and endorsement of their solicitation up to

*This is the second of a group of three articles evaluating the Community Chest.

the specified amounts. Approval of these budgets by the committee was followed by the issuance of an endorsement covering the agency's solicitation of the public, up to the amount of its annual contribution needs.

In due time, when the cooperation of the principal local agencies had been secured by this committee under the diplomatic and foresighted leadership of the late Mr. M. A. Marks, the plans were laid for the second step in the evolution of organized social service work. These plans led to the establishment of the Federation for Charity and Philanthropy consisting of a considerable majority of the local agencies not already combined in the Jewish Federation.

The new federation, in addition to laying the foundations for centralized planning and budget control, also undertook to secure from the public, contributions to cover the requirements of its member agencies. In this respect it met with an encouraging degree of success, although it did not remove the necessity of supplemental appeals by the agencies to the contributing public.

In 1917 the federation was merged with the Welfare Council, a voluntary advisory group of citizens previously appointed to advise with the department of public welfare of the city of Cleveland. The new organization was named the Welfare Federation of Cleveland.

The entry of the United States into the world war in 1917 with the resultant appeals to the public for voluntary contributions for war work and the Red Cross produced an important new factor in the situation. It was found possible, in fact necessary, to arrange for the financing of local philanthropic work out of the proceeds of certain of these war-time drives.

Furthermore, these drives necessitated the creation of a new form of organization known as the Cleveland War Council, supported by a campaign organization of unprecedented size and effectiveness.

Leaders in civic, business and philanthropic affairs became members of this organization, and their devotion, as well as their prestige and efficiency, produced commensurate results in the field of money raising.

With the coming of the armistice and the resultant disbanding of war-time organizations, there developed a strong sentiment in Cleveland, fostered by many business men prominent in the war council, favoring the perpetuation of the war chest as a peace-time project with a view to providing the operating requirements of local philanthropic agencies, and to meeting the continuing demands for European war relief.

The result was the establishment of the Cleveland Community Fund. The governing body of forty individuals represented respectively the War Council, the Welfare Federation, Federation of Jewish Charities, the city administration, and the chamber of commerce. The general chairman named was Mr. Samuel Mather, who, subsequent to retiring from this office, was made honorary chairman for life.

The first peace-time campaign of the Cleveland Community Fund was conducted in November, 1919. The campaign goal of $3,425,000 was oversubscribed by over one-half million dollars. Since that time there have been three annual campaigns, all of which have met with substantial success.

The Community Fund is thus seen as having had a long period of evolution with a view to the ultimate accomplishment of two main purposes: first, the elimination of waste in philanthropy, and second, the enlistment of all citizens able to carry their share of cooperative financing of philanthropic work.

The present set-up may be interpreted as follows:

First, the Cleveland Community Fund as an organization representing the contributing public, aiming to insure the effective use of contributions entrusted to it.

Second, the Welfare and Jewish Federations respectively, representing practically all local agencies deriving support from the Community Fund.

To these two federations the Community Fund delegates the detailed planning and coordinating of social service work. The Fund, however, bears in mind its responsibility to its contributors to take care that this work is well and adequately performed.

The results of the establishment of the Community Fund have been even more far-reaching than was generally anticipated. The Fund has secured the generous cooperation of the contributing public. It has never experienced difficulty in recruiting team workers for each annual campaign, to the number at the present time of over 5,000. Newspaper support has been equally generous, as has also the support of the principal sectarian groups. In fact, there has been noted a growing tendency toward removal of sectarian lines and increased cooperation between religious sects which is regarded as extremely significant.

To the business public, representing the principal volume of contributions, the creation of the Community Fund has meant the elimination of philanthropic waste to a very high degree—waste as represented in commissions to solicitors, time lost in interviews with solicitors from various agencies, money lost through duplication of ac-

tivities, and through the lack of centralized budget study. All these things are true, notwithstanding the marked increase in the volume of philanthropic giving which Cleveland has experienced under the Community Fund. The community is fully reconciled to this increase, since it has become thoroughly "sold" as to the beneficial effects of an adequate social service program. A street beggar in Cleveland is, at the present time, rarely seen. There are many other evidences obtainable from statistics on health, dependency and delinquency which prove the favorable results of Cleveland's tremendous social service program.

In presenting this picture, it is necessary to emphasize the essential character of the work now performed by the two local federations. They are at the present time indispensable to the smooth running of the plan, as they provide the detailed scrutiny of local activities necessary to efficient philanthropy. In short, the federation of finance and the federation of service are coordinated.

Budget control in relation to local agencies is mainly applied by the two federations dealing with their respective memberships. The budget machinery of the Welfare Federation, by reason of its size, (comprising 96 local agencies) is more detailed than that of the Jewish Federation. The principal activity of the budget committee of the Welfare Federation occurs in midsummer each year, at which time the constituent agencies submit their budgets for the following calendar year. The budget committee is subdivided into several groups according to types of service rendered. Thus there is a relief agency subcommittee, a hospital subcommittee, a recreation subcommittee, while the children's agencies and homes for the aged have their respective subcommittees. Each subcommittee receives budgets of its appropriate agencies and confers with representatives of each agency in turn with a view to agreeing upon a budget. As soon as all the subcommittees have completed their work, their reports are submitted to the budget executive committee of the Welfare Federation where the needs are considered as a whole in the light of current financial conditions. The recommendations of the budget executive committee are then submitted to the executive committee of the Federation and thence to the Federations board of trustees. They next reach the investigating committee of the Community Fund which also receives the recommended budget of the Jewish Federation and makes a general study of all other items for inclusion in the Community Fund budget. Opportunity is afforded for the Community Fund to exercise veto power if it so desires as to any budget items. In this connection, however, by reason of the form of the Community Fund Council, comprising representation from each of the Federations, no important disagreements have arisen.

Recommendations of the investigating committee, after review by the Fund's executive committee, are submitted to the Council, which accordingly approves or amends the budget of the Community Fund for the ensuing calendar year. This budget forms the basis for the annual campaign conducted in November which, by tradition, covers the eight-day period ending the Monday before Thanksgiving.

Preparing for Annual Campaign

The annual campaign is in charge of a campaign committee annually appointed by the general chairman. Fund regulations provide that not less than seven members of this committee should be members of the Community Fund Council. Beyond this number members may be selected without regard to Council membership. The campaign committee, headed by the campaign chairman, is composed of certain members at large and of the heads of all important sub-divisions of the campaign organization. According to present practice the campaign committee functions mainly through these subdivisions and has general meetings only during the intensive preparation period.

Preparations for the annual campaign are an important factor of the year-round work of the permanent staff which studies campaign methods, cultivates new prospects and generally lays the ground work for the campaign well in advance.

The campaign organization covers the various fields of, first, solicitation of pledges, second, publicity through all forms of contact with the public and, third, campaign routine such as supplies, transportation, records.

The most important campaign unit is Division "A" of the soliciting organization, comprising forty teams of prominent business and professional men with an aggregate membership of about 500, having as its function the solicitation of approximately 20,000 Cleveland individuals and firms representing the larger prospective givers. This division annually accounts for about 80 per cent of the campaign receipts, or in the neighborhood of $3,500,000. Its team members are supplied with prospect cards with name and address of each prospect to be solicited and showing the anticipated amount to be pledged. All team workers in this division attend daily luncheon meetings during the campaign, at which results are checked up and campaign enthusiasm is generated.

Division "B" represents the neighborhood soliciting organization, with a personnel of approximately 3,000, organized according to city

wards and suburban districts. The organization in each ward canvasses prospects having their residence or business address there. The personnel of this division comprises men and women, many teams being organized by various civic groups desiring to aid the campaign. This division in the recent campaign produced approximately $300,000 in pledges.

Division "C," otherwise called the industrial division, covers all factories, offices and stores having ten or more employes. In each of these establishments the division secures the appointment of a keyman who supervises the solicitation of all the employes of the company and renders his report to the division. The division operates through twenty teams of ten members each, each member being responsible for the progress of the campaign in an average of ten establishments. The function of each team member accordingly is to keep contact with his keymen and make certain that they are equipped for their tasks.

In the November, 1922 campaign this division was successful in securing the cooperation of 1,450 local business concerns with a total of 155,000 employes contributors, aggregating $530,000 in pledges.

Reference should be made to the schools division, cooperating with Division "B," having as its function the conduct of the campaign in all schools in Greater Cleveland. This division secured contributions up to 10c (maximum) from approximately 175,000 school children last fall, and from a large proportion of teachers in the schools. The financial results of this division's work are consolidated with the figure given above for Division "B."

Campaign publicity has several important branches, consisting of (a) newspaper advertising, news stories, feature articles; (b) speakers' bureau furnishing speakers to address meetings wherever the subject of the Community Fund is to be presented; (c) motion picture films; (d) street signs and posters; (e) store window exhibits of the work of the Community Fund agencies. These headings are sufficiently descriptive without elaboration. In brief, the campaign publicity aims to sell the idea of the Community Fund through the spoken and written word and through visual presentation of the activities supported by the Fund.

In reference to the matter of campaign routine, there are of course provisions for purchasing and distributing of campaign supplies and for the maintenance of proper campaign records. These subjects would require a great deal of space to describe completely, but this is not required here.

Prominent factors in the success of the four annual campaigns of the Cleveland Community Fund thus far held are (a) the whole-hearted support of the movement by successful and influential men and women of this community, (b) excellent newspaper support, (c) leadership given to the Community Fund by outstanding Cleveland citizens, (d) community-wide interest in the activities supported by the Community Fund.

The Community Fund is locally regarded as having an excellent effect upon the life of the community. It brings together all classes and creeds without discrimination and unites them in a common purpose on a scale duplicated by no other existing cause. The people of Cleveland are alert to defend the Community Fund; they are interested in its activities; they are doing their best to make it a permanent Cleveland institution.

5,000 HOSPITALS TO OBSERVE MAY 12

Inquiries from Medicine Hat, Alta., and from Miami, Fla., in the same mail; requests for 300 copies of suggestions for a program to be distributed to every hospital in a state by the director of the state hospital bureau; copies of a pamphlet which was sent to 700 hospitals in three states by the secretary of a hospital association; an inquiry from an Eastern mayor for six copies of suggestions for a program for six municipal hospitals—these are typical of the daily flow of correspondence into the office of Matthew O. Foley, 537 South Dearborn street, Chicago, executive secretary of the National Hospital Day Committee, as thousands of hospitals throughout the United States and Canada prepare for the observance of third annual National Hospital Day on May 12.

A letter of commendation to E. S. Gilmore, superintendent, Wesley Memorial Hospital, Chicago, chairman of the National Hospital Day Committee, from the Prince of Wales; reports of meetings of hospital groups in dozens of cities throughout the United States; announcements of plans for broadcasting National Hospital Day announcements; a letter from a manufacturer of uniforms telling of his asking 2,000 department stores throughout the country to reserve space in their windows for a National Hospital Day display; these and many more are the preparations being made for the occasion.

The hope that some 5,000 hospitals of the United States and Canada will join in the observance of National Hosptial Day this year, as expressed by the national committee seem near to fulfillment, and every hospital which has communicated with the committee has indicated that it has plans laid for a pretentious program. Graduation exercises for nurses, baby shows, pageants, public meetings, luncheons, exhibitions of various departments and similar features form the general character of the programs for the big day.

One of the gratifying features of the 1923 preparations has been the wholehearted and active cooperation given the committee, not only by various state and sectional associations, but by the national groups, including the denominational organizations. In several cases these associations have printed special literature and distributed it among their members, strongly urging extensive programs.

The remarkable success of the National Hospital Day movement, still less than two years old, has been due first of all to the ready recognition of the importance of improving relations between the public and the hospitals.

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American Sanatorium Association, New York
C. W. Munger, M.D.,
Blodgett Memorial Hospital,
Grand Rapids, Mich.
W. G. Neally, M.D.,
Brooklyn Hospital, Brooklyn, N. Y
Willard C. Rappleye. M.D.,
New Haven Hospital, New Haven, Conn
Lewis A. Sexton, M.D.,
Hartford Hospital, Hartford, Conn.
George F. Stephens, M.D.,
Winnipeg General Hospital
Winnipeg Man.

LOOK TO YOUR LEGAL FOUNDATIONS

SOME time ago an action was brought in the courts of Utah by one Getzhoffen, against the Sisters of the Holy Cross Hospital to recover damages for injuries which he alleged he sustained while a patient in the hospital.

It was stipulated that the Holy Cross Hospital was a corporation organized under the laws of Indiana, and that it was doing business in Utah for profit. While in the course of the trial it was shown that the hospital was conducted as a charitable institution and in no sense for profit, the charter of the hospital, brought in evidence, clearly provided for capital stock, one of the earmarks of a business corporation. Consequently, the court in rendering its decision stated that "the articles upon their face purport to create an organization for pecuniary profit. It has been quite generally held that the nature of the corporation must be determined from its articles of association and that its character cannot be changed or modified by parol evidence; that the object and purpose for which a corporation is organized must be gathered alone from the written instruments and cannot be aided or varied or contradicted by testimony outside of the instrument itself."

In a similar case in Minnesota the articles of incorporation of a hospital provided for capital stock. This, however, was never issued, the corporation depending for support almost wholly upon contributions. The court ruled that the character of the corporation must be determined solely from its articles of association and that its character cannot be changed or modified by evidence that it was not in fact such a corporation.

Inasmuch as charitable hospitals, as pointed out by Mr. John A. Lapp in a paper which he read on "The Liability of the Hospital for the Acts of Its Servants" at the March meeting in Chicago of the Congress on Medical Education, Licensure, Public Health and Hospitals, have a large immunity from the risk of negligence, it would be well for all such hospitals to look to their legal foundations lest they fall into the pitfall of the Sisters of the Holy Cross Hospital. It is especially important that hospitals that have passed from the proprietary into the public service class should be careful to see that their articles of incorporation no longer retain any of the evidences of a profit-making organization. For while decisions of the court are numerous, one of the almost universal conclusions is that the form of the corporation, rather than the character of the work done in the institution, largely determines the classification of the hospital. If therefore its articles of association carry any of the earmarks of a business corporation, the hospital will be regarded by the

court as a corporation organized for profit, even though it has never made a cent and its works of charity are known on every hand.

COULD THIS OCCUR IN YOUR HOSPITAL?

A HOSPITAL of moderate size in a mid-western city, a few years ago, added a new pavilion to house its operating suite, its x-ray department, its laboratories for bacteriological, pathological and bio-chemical work and its surgical and maternity services.

The construction of a pavilion of this highly specialized type involved the installation of a large and varied amount of fixed equipment, by no means the least of which were the various kinds of piping—water, steam and waste. This piping installation, if it was to be done efficiently, necessitated the intelligent determination of a number of important questions, as for example: Is the nature of the water supplied the institution such that galvanized wrought iron or galvanized mild steel will serve for the water supply piping? Should the piping leading from the hot water heaters be brass or wrought iron, or the shell of the heaters cast iron or steel, Since free oxygen attaches standard steel piping, would it not be better to install wrought iron or brass piping in the steam heating system? Shall extra heavy cast iron or vitrified non-porous stoneware be used for the waste piping leading from the laboratories and how shall this be arranged to minimize the destructive action of acid wastes? Shall the intermediate pressure in steam lines leading to the sterilizers consist of brass or wrought iron?

But unlike some superintendents of whom we know, the superintendent of this hospital, upon whom the board of trustees relied with an unwarranted faith, knew little and cared less about the kind and quality of piping that was installed in the hospital's new pavilion. He was too busy with what he conceived to be more important duties to concern himself with so prosaic a subject as piping. He was altogether willing to leave the selection, arrangement and method of installation of this exceedingly important line of equipment entirely to the architects, whose knowledge of piping in its relation to hospitals was in this instance embarrassingly small. Moreover, the hospital had only a limited amount of money to put into the new building. Why install expensive piping when cheaper grades would do just as well? Accordingly cheaper grades were installed.

But after a few years went by, corrosion accomplished its inevitable task. The then superintendent fell upon unhappy days. Leak after leak sprang in pipes that should have stood up for another generation; indeed, throughout the life of the building itself. Ceiling after ceiling fell, or carried unsightly stains. One day found the institution hampered by a lack of adequate water; another day by a lack of adequate heat. There was never-ending trouble, and largely because one hospital superintendent knew little and cared less about piping.

We have different and encouraging pictures in the superintendent who spent days with his engineer and the architects in checking back the details of the piping equipment of his new nurses' home, in order to assure himself that his institution installed the best piping there was to be had for this purpose, and in the hospital which had a special committee, consisting of the architect, a consulting sanitary engineer, a member of the board of trustees and the superintendent, appointed for the sole purpose of selecting for its new pavilion the very best rust-proof piping possible.

Surely the superintendent of today is under a moral obligation to so inform himself about the role which not only good piping, but all well-made fixed equipment, plays in the successful and economical administration of his hospital.

THE ODORLESS HOSPITAL

"IN THE dark-backward and abysm of time" when every practitioner of medicine wore a Prince Albert, a mussed silk hat and a Van Dyke beard, it was no uncommon thing for some naive layman to remark, "I knew you were a doctor the minute I smelled you." Those were the days when wounds were exorcised of the demons of infection by carbolic acid and iodoform, and since "smells are surer than sounds or sights to make the heart-string crack," our memories are sometimes deeply stirred by the aromas of those drugs no less than by more pleasant odors. The scent of dust after rain recalls vividly some childhood scene; the perfume of the lilacs brings back that spring evening when the fateful proposal was made; a whiff of chloroform makes live again that painful hour before the tip-toeing nurse announced that it was a boy; and the pungency of ether revives the awful suspense before the surgeon removed those shell-fragments from that same boy. Yes, the whole history of our lives might be made to pass in review by the stimulation of our olfactory sense.

Haller in 1763 classified smells as agreeable, intermediate and disagreeable, and years later Swaardemaker proposed his olfactometer for measuring the degree of smells. Recently osmics, the science of the stimuli, organs and the sense of smell, has taken its place in the field of knowledge, the substances which give off odors being christ-

ened osmyls while the organs which receive and translate these stimuli have been dubbed osphrenes. We have traveled far since the Anglo-Saxons coined their verb to smell, "stenc, stincan," from which we have our vulgar yet forceful verb, to stink, now unfortunately banished from polite social usage. Yet there is no paucity of vocabulary to express the idea.

In justice, it must be said that the men and women who are administering our hospitals today have consciously and unconsciously labored to reduce hospital odors, that collective group of smells which quicken the painful memories of many persons. The advances in hospital architecture and ventilation, no less than the discarding of the superstition that stink means strength in disinfectants and drugs, have contributed to render less disagreeable the atmosphere of hospitals; but it is doubtful if these smells have been brought down to an irreducible minimum.

The importance of odors in the environment of well people is very great. Many of them produce a sense of oppression, of fatigue, of headache, and the physical deterioration of many trades may in part be traced to this fact. How much more important it is that sick people whose bodily or mental mechanism is already below par be kept in as odorless an atmosphere as possible. Who can forget the sour, disagreeable smell which used to exist in the wards for the tuberculous, or the mousy smell of the long rows of typhoid fever patients, mingled with the aroma of the turpentine in the floor-wax and the resinous emanations from the yellow soap used in laundering the bed linen. The wax and the soap were supposed to have "clean" smells because they recalled polished floors and things scrubbed; beef stew was supposed to have a "strengthening" smell because of the memories of the piece of neck from which it was made, and the intern's gown, redolent of ether announced to all that he was a budding surgeon.

In the administration of hospitals it is wise to leave out of the environment as many smelly things as possible, to require that the personnel shall not come into contact with patients, redolent of tobacco or the odors of diet kitchen or operating room. It might be wise even to admit only the odorless flowers; certainly those whose perfume makes the patient think of a funeral should be excluded. Good ventilation and provision for the rapid removal of odors should be provided and the mistake of attempting to "deodorize" one odor with another should be avoided. Above all, the entire hospital force should be indoctrinated with the idea that the odoriferous hospital is a sphacelus to be cast off and replaced by healthy odorless tissue.

A GIFT FOR NURSING EDUCATION

WORD comes to us just as we go to press that Mrs. Chester C. Bolton of Cleveland has notified the nursing council of the associated hospitals and medical school group of Western Reserve University of her readiness to contribute one-half of the million dollar fund needed for the establishment of an endowed university school of nursing in Cleveland. This is the third outstanding gift of which we know for nursing education. The first was a gift of $200,000 from Florence Nightingale to the first school of nursing. This money represented the gift of the English people to Florence Nightingale on her return from the Crimea, and her realization of the need for the endowment of nursing schools. The second was a gift from Mrs. Helen Hartley Jenkins to endow the department of nursing and health in Teachers' College, New York.

The significance of Mrs. Bolton's gift is enhanced by the fact that it is a gift made by a woman for the education of women who wish to enter a profession. Those who are acquainted with the nursing field know that Mrs. Bolton has been studying the aims and ideals of this profession for years, and this gift is an evidence of her conviction of the important relationship which the preparation of the nurse bears to her service.

The gift has further significance in that is follows hard on the heels of the publication of the long looked-for report of the committee on nursing and nursing education in the United States, the gist of which will be found in Miss Mary C. Wheeler's summarization on page 415 of this issue, under the caption "Rockefeller Report Pictures Ideal Training School for Nurses."

That Cleveland offers an ideal environment for the development of such a school will be conceded by all who are familiar with the splendid civic consciousness of that city. Additional considerations that point to the success of this venture are the progressive attitude of the trustees of Western Reserve University, and particularly of the college for women, evinced in the establishment of the university's department of nursing education in 1921, the liberal response of the outstanding members of the medical profession of the city in their approval of the projected plan, the marked cooperation that exists between Lakeside Hospital, the Babies' Hospital and the Maternity Hospital, and the warm response of the principals of their schools of nursing.

This gift places Cleveland first of a number of cities that are attempting to raise funds for university schools of nursing, a position of which it may indeed be proud.

FIVE PRIZE-WINNING PLANS IN SMALL GENERAL HOSPITAL CONTEST

FIVE methods of solving the problem of small hospital construction are shown in the following pages, in the reproduction, description and critical analysis of the designs which won prizes and honorable mention in THE MODERN HOSPITAL'S $1,000 international architectural competition recently closed.

The publication of these five plans marks the first step in a concerted and serious study of small hospital architecture made in any nation, and it is undoubtedly destined to influence small hospital design and to stimulate further study.

Awards in this contest went to Butler & Rodman of New York City, John J. Roth of Los Angeles and Ernest C. Hoedtke of Cambridge, Mass., respectively. Honorable mention was made of the designs of Cervin & Horn of Rock Island, Ill., and Prof. Lemuel Cross Dillenback of the University of Illinois school of architecture.

A complete report of the jury of award in the competition is given. The jury, which was composed of Dr. S. S. Goldwater of New York, Clarence H. Johnston of St. Paul, William Buck Stratton of Detroit, Asa S. Bacon of Chicago and Miss Adelaide M. Lewis of Kewanee. Ill., met in Chicago on March 5-7, selected the five designs they judged most meritorious and drew up their report. Eighteen other plans of interest will be published in the June, July and August issues. The report of the judges follows:

Report of Jury of Award

The fifty-one sets of plans which were offered for the consideration of the jury were first examined, for the purpose of determining their eligibility, by Mr. Carl A. Erikson, acting for Mr. Richard E. Schmidt, architectural adviser, whose attendance was prevented by serious illness.

Mr. Erikson reported that, with one or two exceptions relating to trivial details, the contestants had complied with the terms of the competition.

Before proceeding to a consideration of the plans the jury adopted a system of grading which provided for the analysis of each plan submitted, from the standpoint of (a) economy of construction, (b) efficiency of operation, (c) merit of design and integrity of presentation, (d) health values, (e) flexibility. To the elements of economy of construction and efficiency of operation sixty out of a total of 100 points were allotted.

The first inspection of the plans disclosed a number of schemes which, while highly meritorious as hospital plans, were regarded by the committee as pre-eminently suited to large and middle-sized hospitals. Inasmuch as the major purposes of the competition had been declared to be "(a) to stimulate the building of small hospitals that are efficiently arranged, suitable for smaller communities, as well as architecturally creditable; and (b) to bring to the trustees of small hospitals floor plans that shall combine simplicity of design and good taste with a compact arrangement of the various departments of the hospital now regarded as essential to the efficient, scientific care and treatment of the sick," elaborate schemes lacking in compactness and simplicity of arrangement could not be regarded by the jury as entitled to favorable consideration.

The designs submitted exhibited wide variations of merit; a few in fact seemed quite devoid of merit but no plan was eliminated on this score alone, for it was conceivable that the hospital field might profit by the publication of an interesting and meritorious floor plan even though the accompanying design was poorly rendered.

A number of otherwise interesting plans failed to command approval because the working, and especially the nursing units, were put together in a manner that would have compelled the employment of an unusually large force of nurses and other workers.

The committee devoted the last day of its deliberations to the systematic re-consideration of the eleven plans which had received the highest rating; it was from this group that the prize plans were selected.

A critical analysis of the individual plans, including a brief statement of some of the considerations that influenced the jury in its decisions, follows:

First Prize Design

The first prize design solves the problem of the general hospital for a small community in a simple and direct way, making for economy of construction. The design while somewhat meager in its elements, is altogether appropriate and satisfactory, and has little of the institutional look. The general shape of the building and the pleasant skyline should give, with well chosen mate-

JUDGES WHO SELECTED FIVE PRIZE PLANS OF SMALL HOSPITAL

Above, Architects William B. Stratton and Clarence H. Johnston; center, Dr. S. S. Goldwater; below, Superintendents Asa S. Bacon and Adelaide M. Lewis

rials, a very satisfactory effect. The construction is very simple and economical and indicates the use of materials and workmanship easily procurable in almost any locality. Windows are the practical, conventional hospital type, with transoms. The resulting severity is relieved by the very simple treatment of the arched panels. The problem of choice of location has been appreciated by the designers who have chosen a sunny hillside site.

The interior arrangement of this building can be easily understood and is well adapted to its various functions. Each department can be approached without disturbing the activities in any other department. Visitors, out-patients, ambulance cases and tradespeople are taken care of directly. The kitchen and other important service portions are, on the whole, well arranged and occupy well lighted rooms above grade. Were it at all possible, it would have been desirable, however, to have located the laundry nearer the boiler room, thereby removing the objectionable noise of machinery under the wards and obviating the necessity of a long run of pipes. The elevators and stairways, the ambulance and supply approaches and various work rooms are so placed that their use will not disturb the patients. This can also be said of the emergency, receiving and general operating rooms.

The nursing and housekeeping arrangements of the upper floor are well located and, being simply arranged on each floor, tend to prevent confusion in service. It would be well, however, to consider changing the position of the nurses' stations to provide an easier command of all the corridors. Two nursing units make possible a minimum nursing service.

The maternity and children's departments, while having ample sunlight, are well separated from other patients. In the maternity department, however, the room for the incubator which cuts out light and ventilation from one end of the corridor should be eliminated and the incubator placed in the nursery where it will be under the eye of the nurse.

The patients' rooms are all placed with sunny exposure, and are of various sizes and appointments, so that an ample variety of service may be given. The porches are well placed for the fullest use of sunshine and air.

The possibility of extension or enlargement is fairly good. It is believed, however, that future extension should be to the west rather than to the south, since it is felt that extension in this direction might easily throw the whole scheme out of balance.

There are a few other minor details that might be changed to advantage, but on the whole this plan presents a solution of the small hospital problem with a degree of intelligence somewhat rare, and in the judgment of the committee is fairly entitled to the first prize.

Second Prize Design

The second prize plan also represents a type very suitable for the small community. The exterior is simple, pleasing and very beautifully rendered. In economy of construction it meets the conditions well, although simplification could be made without injury to the plan. The location of departments is made with intelligence and makes for efficiency of operation and economy in nursing service. The patients in general are well provided with sunlight. Certain sections of the basement, however, are poorly lighted and ventilated. This is especially true of the laundry and its accessory rooms, the sorting room and the clean linen room, as well as of the drug and several storage rooms. In the basement, moreover, all the corridors are blocked from light and air.

It is, of course, unfortunate that access to the sterilizing room can be had only through the operating room. There are other minor defects in the plan that subject it to criticism, but which on further study could easily be corrected.

The design of the exterior is unique and refreshing, in that attention is given to form and color to an unusual degree. Undoubtedly it would be a distinctive building if erected in a proper environment; while the future wings shown on the plot plan may not be placed to the best advantage, the plan readily lends itself to extension.

Third Prize Design

The third prize design is a very excellent plan although somewhat more ambitious and expensive than the competition warrants. The general construction of the building is simple but it is perhaps a bit too severe and institutional in its handling, and the central tower seems out of proportion to the rest of the building and an unnecessarily expensive feature. The relation of the departments one to another is good, and efficiency of operation was given careful study by the competitor. Patients are well taken care of in sunny rooms, with ample porch space. The nursing and medical functions are well handled. It is apparent from the refinements of detail shown on the drawing that the designer would be capable of making a thoroughly interesting design of this building if he were to give it more study. The plan lends itself very well to enlargement, by additions to the west wing. The competitor's pre-

sentation of the problem is one of the best and would have been entitled to a higher rating had the design been given more study from an architectural point of view, and had it more thoroughly embodied the idea of a small compact institution.

First Honorable Mention Plan

The plan which received the first honorable mention is so excellent that in the opinion of some of the jurors it should have been one of the prize designs. It is very pleasing and well shown, but in the opinion of the jury is more complicated than the problem calls for.

The L-shaped plan is economical in construction and efficient in operation. It readily lends itself to enlargement but in the opinion of the jury the designer made a mistake in not providing for future expansion to the south, rather than to the north. The building, as planned, might better be placed further north on the lot and extended to the south to form a T-shaped building, with central operating units commanding all three corridors, thereby obviating the establishment of a second nursing unit which would be necessary in the U-shaped building shown by the designer.

The southerly rooms to the rear wing are largely used for special hospital services, rather than for patients, and projection of this wing across the south tends to shade several patients' rooms. The plan, moreover, is not altogether convincing as to service arrangement in the basement. The corridors of the basement are shut in at the end and do not allow for sufficient light and air. Adequate porches too are lacking.

Minor criticisms as to the design of the building, glass areas for windows throughout and several other features, such as the distance of the nursery from the maternity ward places this unusually satisfactory building in the judgment of the jury outside the prize winners.

Second Honorable Mention Plan

The design of the building given second honorable mention presents an interesting type. The designer chose to present his scheme largely as a one floor development, with the administrative, service and operating section in a two story center. The scheme is interesting in a variety of ways, but covers too much space, requiring extra utility and pantry rooms. For a hospital of this size the distances for the nurses to travel are too great. The patients are very pleasantly situated. For a hospital of this type the nursing and other service stations are well placed to handle the wings. The kitchen department is original in its conception and workable.

The placing of the operating and maternity groups on the second floor, while excellent in itself, adds to the nursing requirements; furthermore, it necessitates the additional expense of the installation and maintenance of an elevator and stairway, the saving of which is an important argument for the one story plan. With the exception of the laundry, the basement is very poorly lighted and ventilated and the provision in the attic for housing male and female help is unsatisfactory.

If a community possessed an extensive property for this building, ample funds for its support and the desire of the part of the promoters to produce a hospital design for the patients only, regardless of other factors in the hospital problem, this design would be most worthy and subject to high approval.

Conditions Limited Contestants

While experience has demonstrated the need of laying down conditions in a contest of this sort, it is the opinion of some of the members of the jury that in the present instance, the completeness of the instructions given probably operated as a check on the imagination and inventiveness of those who took part in the competition, and that under freer conditions greater novelty of design and arrangement might have been displayed; but on this point it is difficult to obtain perfect unanimity of opinion.

It seems proper finally to add that the jury's award was made without knowledge on the part of any member of the jury of the authorship of any of the plans submitted.

First prize went to Butler & Rodman of New York whose design, the perspective of which is shown above, is simple and economical of construction.

A SIMPLE SOLUTION OF THE SMALL GENERAL HOSPITAL PROBLEM

AS IN any architectural design, so even more in the case of a hospital is it essential, first of all, to work out a plan which shall satisfy the needs set forth in the program. I have never forgotten the remark made to me by a great French architect: "On a good plan you can make forty good elevations, but first you must have the good plan, and on a bad plan no good elevation is possible." This is a precept too often neglected by architects who start out with the idea of a beautiful exterior and forget that it can only proceed from a good plan.

In studying the plan we were at first tempted by a solution along the lines of tuberculosis sanatoriums in which every room would face the south. The large number of single rooms and the small size of the wards seemed to point to this arrangement which would be most attractive from the point of view of the patients, but it soon became apparent that the great length of the building from east to west would increase the labor of the nurses beyond all reason, while minor objections were the excessive length of heating and plumbing lines; so we abandoned the idea in favor of the plan adopted, in which every patient's room has east, west or south exposure.

This plan appeared to us especially economical in that it permitted the central location of stairs, elevators and service rooms, and still provided for the segregation of the different departments, and allowed for future expansion in three directions.

We assumed that the hospital was to be built in a climate where protection from cold winds should be considered, and therefore selected a site on ground rising gradually toward the northwest. This permitted us to place the business, admitting and out-patient sections of the hospital in the basement on the east, while the slope permits of access to the ambulance entrance on the main floor level. We felt also that it was desirable to place the entrance away from the operating rooms, so that the incoming patient need not be greeted by the blank stare of operating room windows.

The placing of kitchen and laundry was also a difficult problem. In a larger hospital these services may easily be removed from the hospital proper, but when that is impossible for reasons of economy, as in this case, it reduces itself to the question of what are the least objectionable locations.

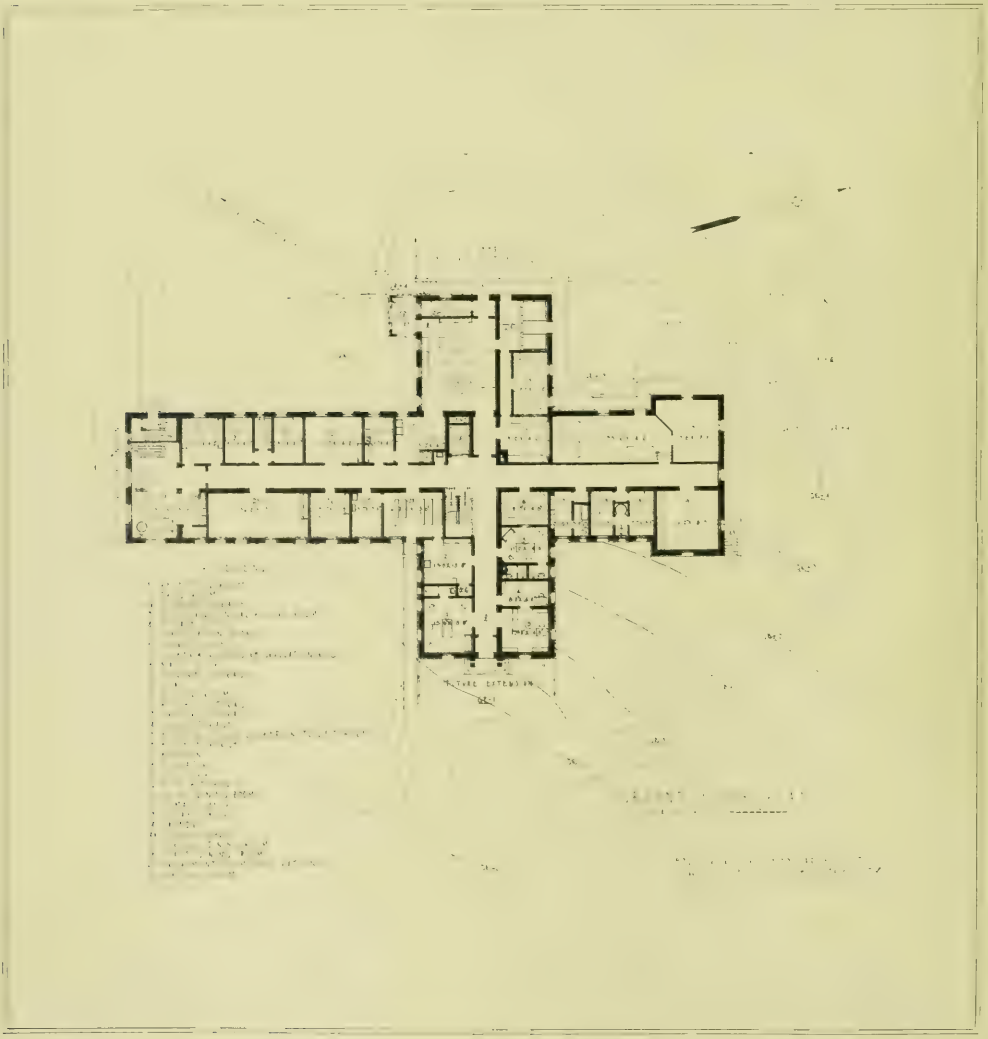
Of all the patients, the children would be least annoyed by the noise of the kitchen, so it has been placed under the children's ward, and for a similar reason we placed the laundry under the main airing balcony, where its presence would be least noted. Other points in plan arrangement which appeared to us worth while are the

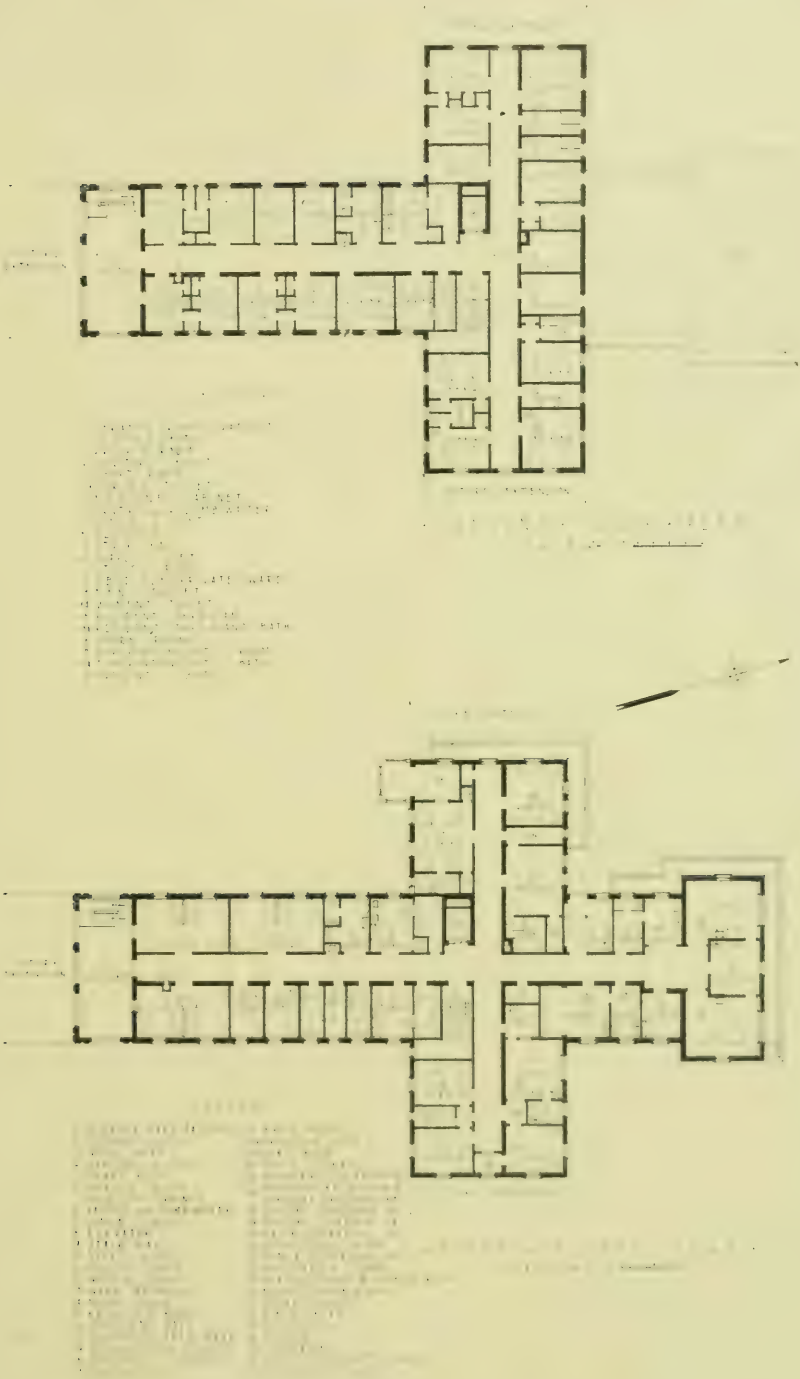
placing of the ambulance entrance out of sight of the patients, and the placing of the x-ray service and laboratory near to the operating department.

Our design for the exterior provides for stucco on brick or concrete walls with roof of tile or slate. The number of beds called for would imply that the hospitals was to be designed for a town of approximately ten thousand inhabitants, where a plot of ground of ample size would certainly be available, and we felt that a cream colored building with green window trim and a red or green roof, surrounded by lawns, with trees and shrubbery would be an addition to the beauty of the town. The modified colonial architecture adopted for this design seemed to lend itself to the exacting requirements of the hospital plan and to produce the most agreeable exterior at least expense.

We believe that this design would be reasonable in cost in view of the fact that all spans of girders and beams are relatively short; it will be noted that one of the corridor walls in each wing has been carried up as a bearing wall, in order to avoid the use of steel columns and heavy girders. The construction would of course be fireproof throughout, the use of steel or reinforced concrete depending upon local conditions. The total cubical contents of the building figured from the basement floor to the average height of the roofs amounts to 415,000 cubic feet.

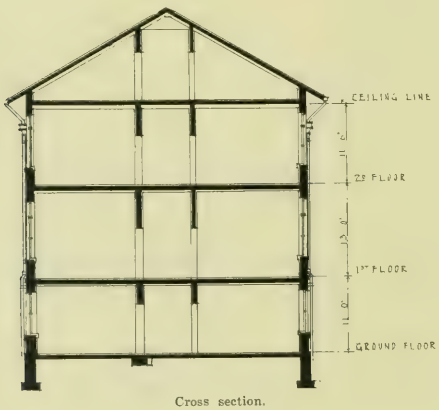
BUTLER & RODMAN.





SOUTH ELEVATION

SCALE 1/8"=1'-0"



Cross section.

WEST ELEVATION

SCALE 1/8"=1'-0"

John J. Roth of Los Angeles won second award on a set of plans which will make for efficiency in operation and economy in nursing service. The perspective of Mr. Roth's design, Italian Renaissance in style, is unique and refreshing in that marked attention is given to form and color.

A BUILDING CHEERFUL IN APPEARANCE AND COMPACT IN DESIGN

THE plan of the small modern hospital should be intensely flexible, so executed that it will be able to take care at any time of any kind of case that offers itself.

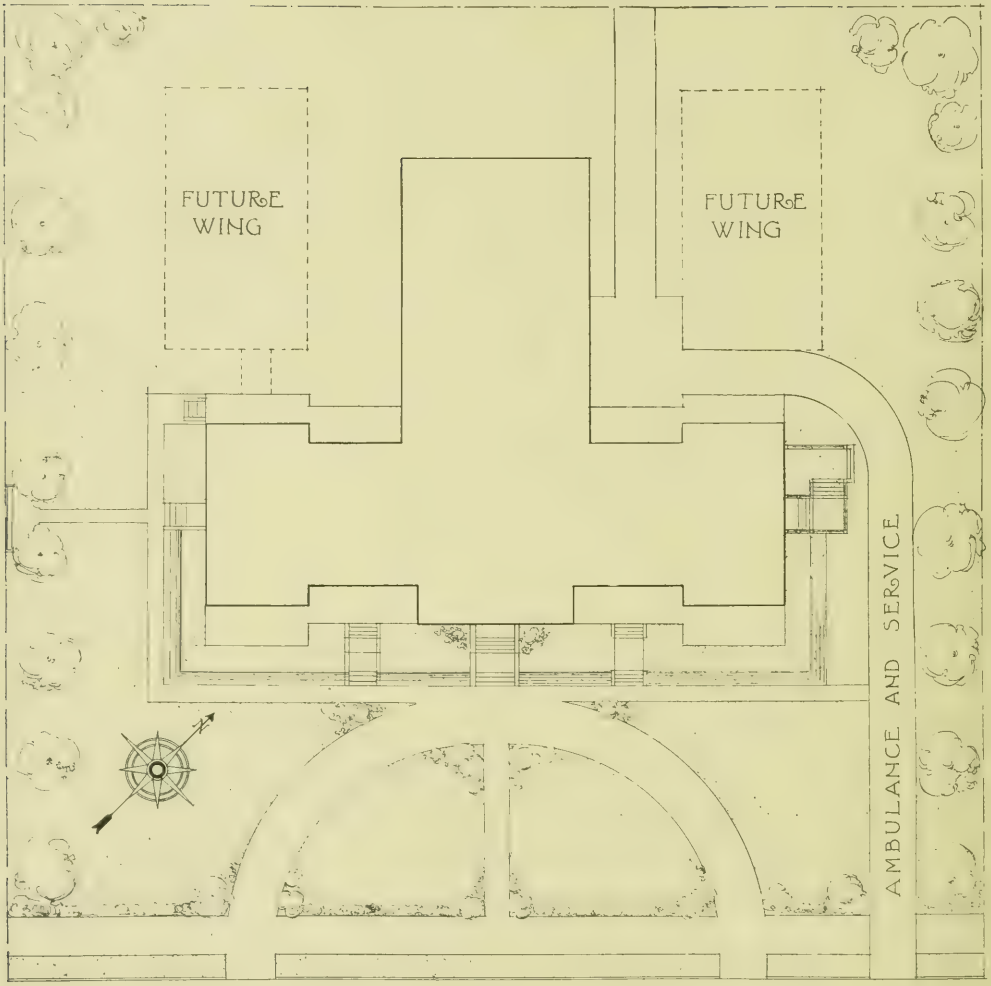
The accompanying design was prepared for an average American community of about 5,000 people which would also receive the patronage of the surrounding country. In planning this building I have endeavored to produce an architectural design for the exterior of the building that would not be austere in appearance but one that would rather create a more cheerful impression and express an atmosphere of peace and restfulness. The building has been placed well back from the sidewalk and has an attractive landscaping with broad lawns, not too formal in design.

The floor plan is arranged so that future additions may be made to the building so as not to disturb its present arrangement; nor will such future additions cut down the lighting or ventilating of any part of the present building.

In its plan, emphasis was placed on centralization so as to minimize the walking distance of the nurse in giving service to patients. With distance cut down, a nurse will naturally be able to take care of more patients with the same effort, and in this way economize in the overhead operation. Airing porch space was generously distributed so as to be easily reached by all patients, making it feasible to have each bed readily rolled into the sunshine; awnings may be erected over any of these porches. Covered porches are not desirable owing to the amount of light, sacrificed to the porch roof and resulting depressive atmosphere in the room.

From the point of construction the two story type is more economical than a taller building, where ground is not expensive and a fairly good-sized lot is obtainable at a reasonable cost. The walls of the one story wing should be built of sufficient strength to carry a second story for future extension of the plant. This would add but slightly to the cost of construction. The walls of the exterior of the building could be constructed either of reinforced concrete, hollow tile or common red brick, with a finish surface of cream colored stucco, the type of wall construction depending upon cost per unit in the locality in which the building is to be erected. Floors are of reinforced concrete slab construction with terrazzo or magnesite finish; marble is used in main corridors. Subdued colors have been adopted for all walls and decorations; little or no woodwork has been employed as trim. Casement sash of steel type is employed throughout, thus giving a maximum amount of ventilation in the warm summer months, easily operated opening and no rattling of sash. The roof over flat portions has a quarry tile surface installed over reinforced concrete, so that if additional story is added, this floor need not be disturbed; the ceiling under is suspended to allow for ventilated air space for summer months. With this type of construction this building should be erected in any community for $125,000.

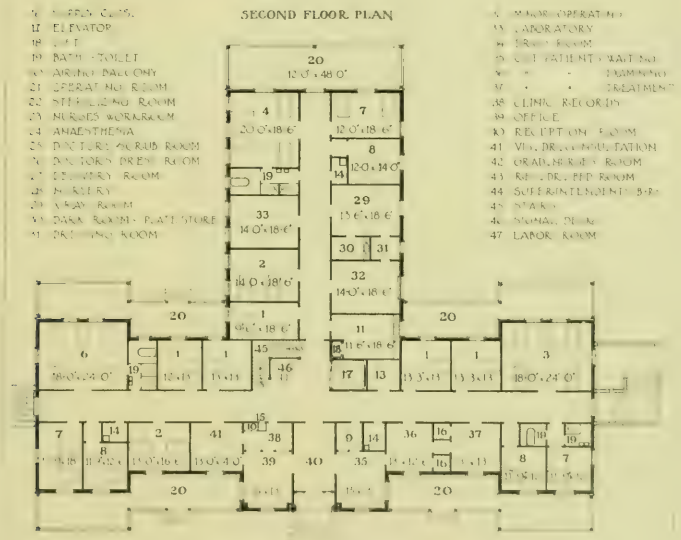
JOHN J. ROTH,



Plot Plan

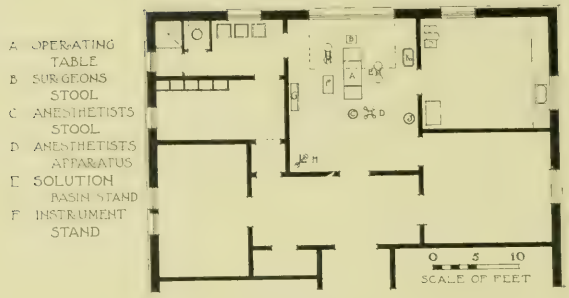
REAR ELEVATION

SECOND FLOOR PLAN

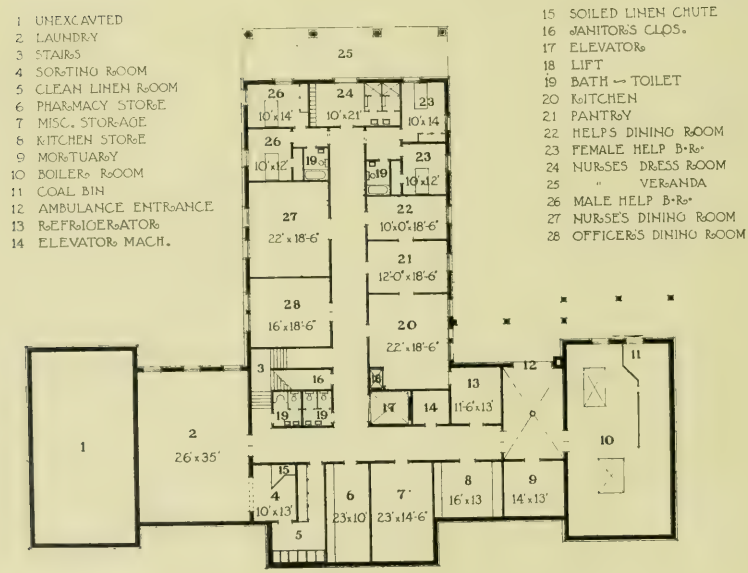


FIRST FLOOR PLAN

SIDE ELEVATION



PLAN OF OPERATING SECTION



BASEMENT PLAN

CROSS SECTION

Third prize was awarded Ernest C. Hoedtke of Cambridge, Mass., for the plans of the two-story Georgian building shown above. Careful attention has been paid by the architect to efficiency of operation, but the tower is thought not proportionate and unnecessarily expensive.

MORE NOTEWORTHY IN ARRANGEMENT THAN IN ARCHITECTURE

THE most important factor bearing on every question in connection with the design of this hospital was the comfort and well being of the patients. It might be said that this is too much a matter of fact to mention; it might also be considered a matter of course by a hospital architect, and then ignored in the more urgent considerations of economy of planning, of materials, and so forth. Every element in this design was tested first and last by the requirement that it make a maximum contribution toward the recovery of the patients.

It was assumed, in general, that the hospital was to be a memorial building in a city of 15,000 to 20,000 inhabitants. It was therefore to be a permanent, fireproof structure, and would cost about $275,000. The site was taken to be a corner lot, and the distribution of the several parts of the building took into consideration the removal of the parts that most needed quiet to the locations farthest from the streets.

The exterior was thought out more in a domestic than in a monumental scale. The idea of this was that a hospital of domestic appearance was altogther more comforting and even inviting, than a massive institution with its suggestion of impersonal, wholesale treatment. Whatever the size of the building, it lies with the architect to make it domestic or institutional in appearance, and the domestic type was decidedly preferred in this design. The materials of the exterior were red brick and stone, and the design colonial.

Many possibilities of enlargement suggested themselves, but whatever scheme might have been followed would continue the long, relatively low outline of the building and it might include repeating units at the back, or separate units connected with the building by glazed passages as drawn.

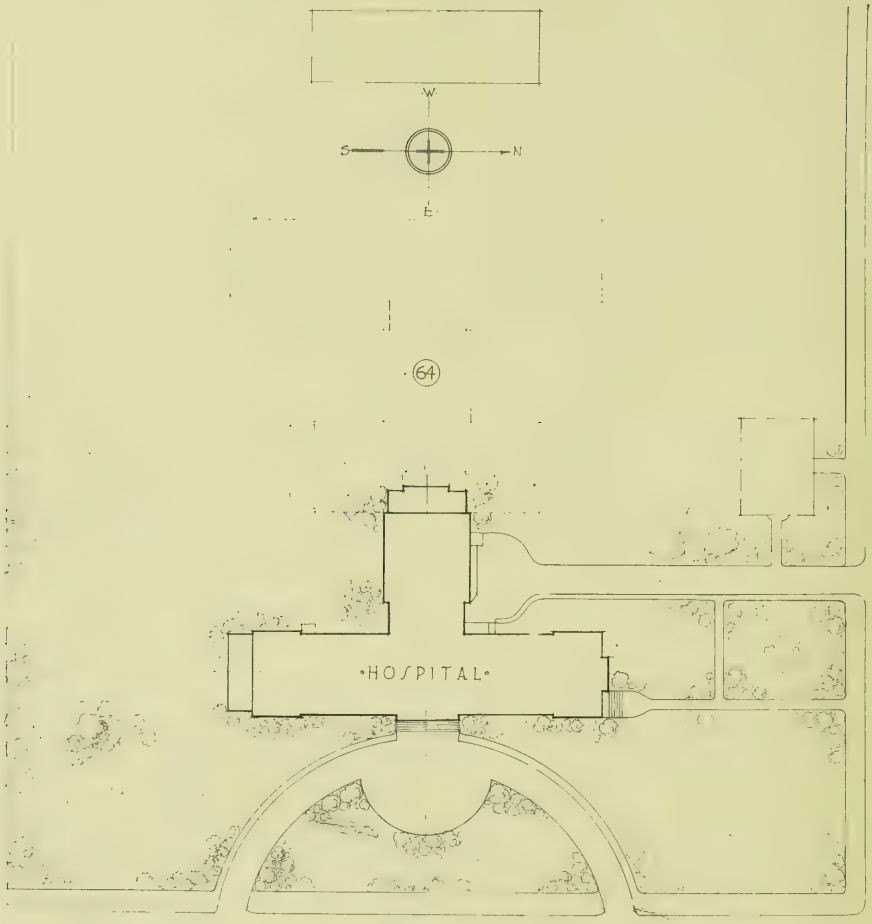
The plan involved, first, the orientation of the building in such a way that all its rooms, especially wards and patients' rooms, should be sunlit at least part of the day; second, the distribution of the large elements so that there would be the least possible necessity for interminably long corridors; third, the location of the services in such a manner that the nursing staff might be small for economy and yet able to do its work with minimum effort.

It was also borne in mind that with the expansion of the building there should be a division into medical and surgical units, the present building being one of these two.

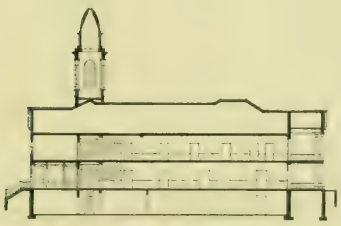
The appearance of the exterior has been mentioned. The interior is scarcely indicated on these drawings, because its attractiveness depends almost wholly on color. The trim and detail of the hospital are necessarily plain. Its color may be attractive or positively repellent.

The proportion of height to room area also is a factor in the success or failure of the interior, and in all these elements much improvement might be made in new hospital work over what is now often seen, always with the object in view that patients must be given every encouragement to recovery that attractive surroundings can provide.

ERNEST C. HOEDTKE.



Plot Plan



SECOND FLOOR PLAN

FIRST FLOOR PLAN

First honorable mention went to a design so excellent that it ranked but a shade below the prize winners. Gervin & Horn of Rock Island, Ill., prepared the design, the perspective of which is shown above.

THIS IMPRESSIVE STRUCTURE IS THOUGHTFULLY WORKED OUT

WHEN designing this hospital building we had in mind to produce an exterior that would harmonize with the surroundings. The building will be located in an industrial community of 10,000 people in which is also located a college with 500 students. Both city and college are growing.

The occasion of erecting the hospital was a gift in memory of a daughter who upon graduating from the college insisted upon becoming a nurse and after a short but useful career was carried away during an epidemic.

A site had been selected diagonally opposite the college campus with its secular Gothic buildings located in the residential quarter of the city. There was little choice as to style. The same consideration led to discarding all three story schemes. A two story building with pitched roof was determined upon, keeping reasonably low so as not to appear to dominate or even compete with the other buildings.

Owing to the shape of the lot, gently sloping to the north and streets on three sides, the "L" type was selected as lending itself to future additions, as will be shown later.

As the building is a memorial the entrance portion has been made into a memorial hall with a fireplace. This hall has been dignified by keeping the floor two steps below the main floor, gaining ceiling height and reducing the number of steps in the vestibule and on the outside of the building and not interfering with any important basement rooms.

Economy is somewhat sacrificed to the style selected. Exterior embellishments are, however, kept as simple as possible, consistent with the attractive buildings nearby. In plan the construction walls are straight-forward, easily laid up and economical. Brick walls are used on both sides of the corridors, for sound proofing and also to eliminate columns and beams with necessary projections around them. The general toilets for men and women were grouped close together, but kept separate by the general bath, all three so connected that one ventilating shaft and one soil stack will serve.

Economy of operation has been particularly considered and the service is concentrated around the middle of the building to minimize walking. The stairs and elevator are close together and around or nearby will be found pantry and utility, the flower room, linen closet, nurses' toilet, janitors' sink, general toilets and bath. The ambulance entrance is close to the elevator and from the elevator is a short distance to the morgue in the basement, the emergency operating room on the main story and the x-ray and operating department on the second story. A service area with easy incline leads to the kitchen and to the main basement entrance where general supplies are admitted, and to the boiler room. Ashes are removed through this same area. One driveway serves for delivery of all supplies, for the ambulance and for coal, as well as for those patients and visitors who come by auto.

The clinical records are placed between the superintendent's office and the doctors' consultation room so that all may have quick access. Utilities are arranged in almost immediate proximity to the patients' rooms and wards. Each private room has a utensil closet with a small refrigerator.

To take care of the future growth of the community, the stairway at the north entrance of the hall is made knockdown to be removed when the hospital is extended. Another nurses' station will be placed in this addition. The plans provide for further extension to the south in case of great growth, rebuilding the sun porch but otherwise interfering very little with the arrangement.

For sudden emergencies such as epidemics the sun verandas can be turned into wards as they will be supplied with call buttons and lights. Several of the single rooms are sufficiently large to be converted into double rooms and some of the double rooms can be used for three bed wards. The children's department, well set apart, can be completely cut off in case of emergency and used for an isolation department until such time as a separate building is erected, as shown on the plot plan.

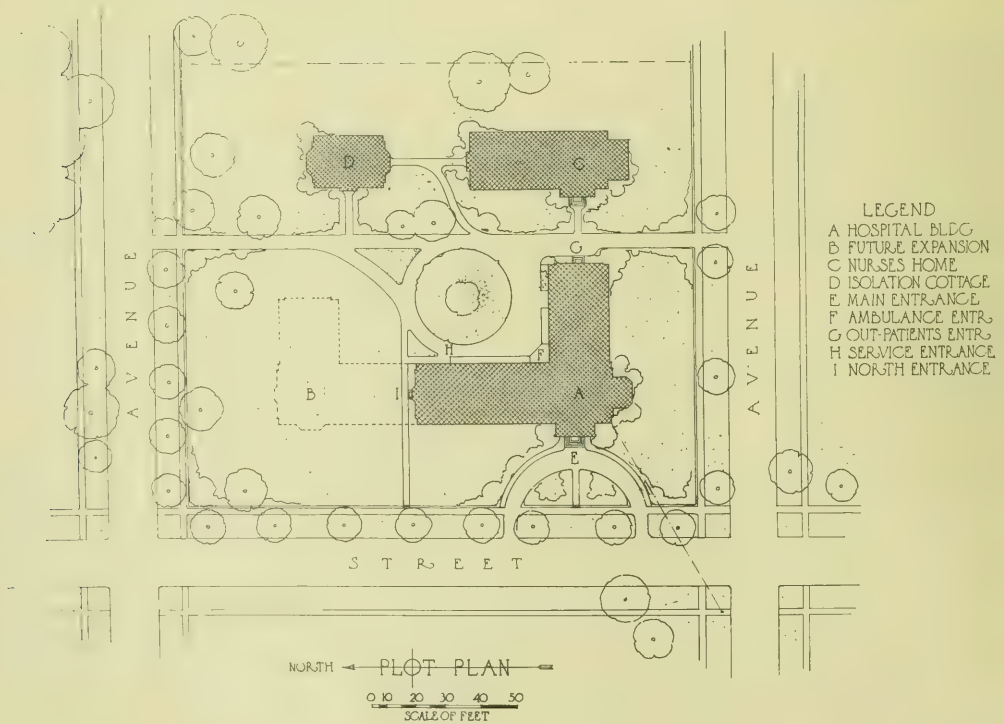
It may be noted that all patients' rooms are so placed that they have direct sunlight during the day, making them cheerful and healthy. The children's veranda is located farthest from the grown patients, so as to disturb as little as possible, and is placed near the driveway entrance. Children enjoy the coming and going of traffic.

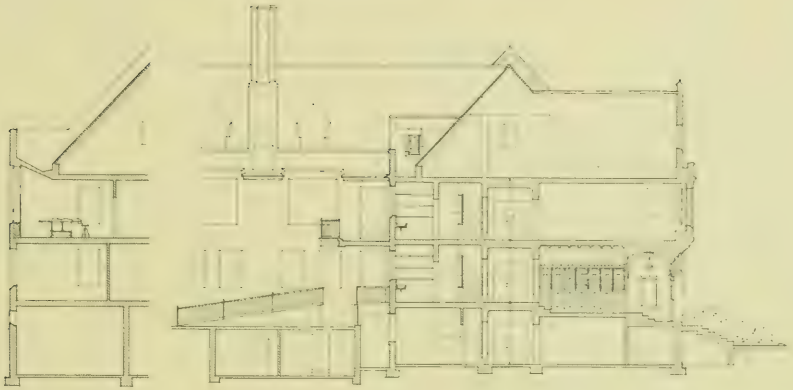
Ventilation is provided to exhaust the air from the utilities, the pantries, the general baths and toilets of two floors and the main kitchen in the basement through one large shaft with a fan in the attic. The halls run through from end to end to permit a complete sweep of air whenever found desirable.

The boiler and coal room are located farthest from the patients' rooms to eliminate noise, as much as possible. It will also be noted that most patients' rooms where it has been possible are located away from the service side of the building.

The gift provided $150,000 for building and equipment, and the community itself must provide a site and the necessary furniture and upkeep. Owing to the unusual amount appropriated for a forty bed hospital, it is possible to provide rooms and equipment which would have to be omitted in many communities.

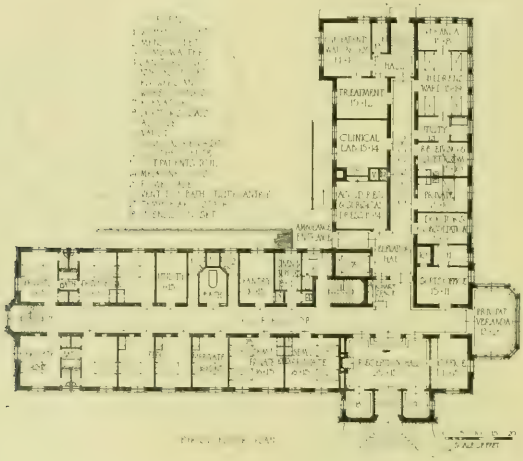
CERVIN & HORN.

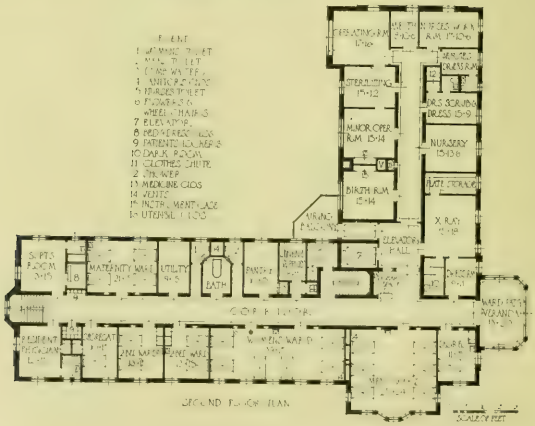




SECTION
OPERATING R.M.

EAST ELEVATION


TREATMENT
CLINICAL LAB.
PRIVATE VERANDA

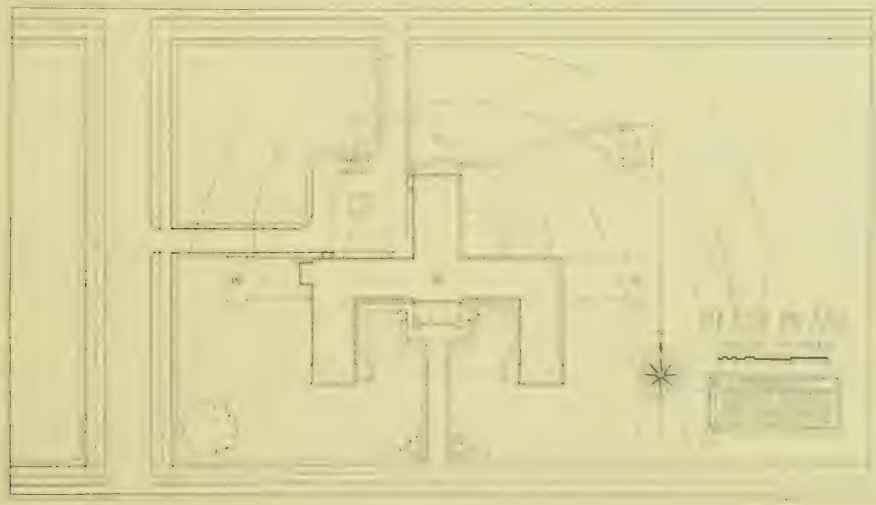

OPERATING R.M.
STERILIZING
MINOR OPER. R.M.
NURSERY
BIRTH R.M.
X RAY
ELEVATOR HALL
SUPTS. ROOM
MATERNITY WARD
UTILITY
BATH
SECOND FLOOR PLAN

Honorable mention also was given the design of Prof. Lemuel Cross Dillenback of the school of architecture, University of Illinois. His plan is an interesting development with the maximum comfort given patients, but it would be expensive to operate.

EXCELLENT, IF PATIENTS NEED BE THE SOLE CONSIDERATION

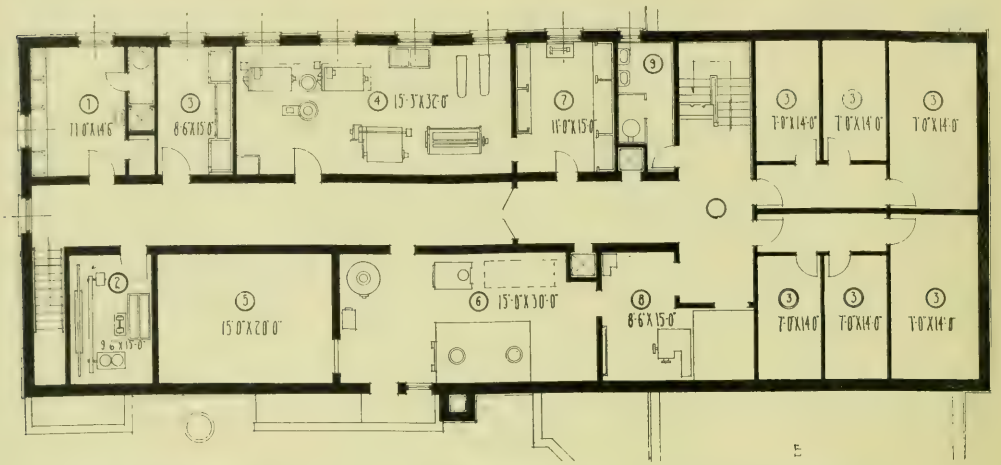
IN ANALYZING the program preparatory to formulating a solution, the question arises. "Of what architectural value is a building of this type?" The absence of limitations as to site and size, the carefully estimated rooms and stipulated areas demand an idealistic conception which might adapt itself to a typical community whether suburban or otherwise. Experience tells us that light and air are distinct assets to the sick room, likewise that southern exposure is most desirable. With this in mind the author proceeded to develop a plan, the composition and orientation of which would open to a majority of patients, directly or indirectly, a southern exposure, and at the same time serve adequately from the standpoint of utility, flexibility and health values. The question of ground area to realize such a conception would not necessarily be an obstacle in a community of from 5,000 to 10,000 inhabitants, for here real estate values, as compared with our cities, are relatively low.

To realize a plan composed of the above requirements, the wings of the building sheltering patients' quarters were arranged to form a court whose conservative quietness and charm of beauty would add to the comfort and cheer of the patients. General services, including kitchens, dining rooms, laundry, etc., were located in a central unit to provide equally adequate services to all parts of the structure. The operating suite is placed on the second floor of the central or service unit, the operating rooms having north exposure for lighting purposes. Maternity ward and nursery, with services, are given southern exposure on the second floor and indicate privacy and



quietness appropriate for such a group.

A rigid separation of male and female patients was disregarded as well as distinctions between rich and poor. The sexes would find sufficient separation in wards or rooms assigned to them, while the bank president might rest in comfort in a miniature suite.



Basement plan.

BASEMENT

1. Helps' toilet and dressing room.
2. Refrigeration room.
3. Storage.
4. Laundry.
5. Coal room.
6. Boiler room.
7. Clean linen room.
8. Elevator machine room.
9. Men's toilet (public).

FIRST FLOOR

1. Private and semi-private room.
2. Women's ward.
3. Men's ward.
4. Children's ward.
5. Segregation room.
6. Recovery room.
7. Medicine closets and sinks.
8. Pantrys.
9. Utility rooms.
10. Linen closets.
11. Janitor's closets.
13. Supply closet.
14. Veranda (children's).
15. Veranda (ward patients).
16. Veranda (private patients).
17. Accident, receiving and surgical dressing room
18. Drug room.
19. Waiting room (out-patients).
20. Treatment room (out-patients).
22. Office.
23. Reception room.
24. Locker and dressing room (graduate nurses)
25. Kitchen.
26. Diet alcove.
27. Cold storage room.
28. Storage for groceries.
29. Officers' dining room

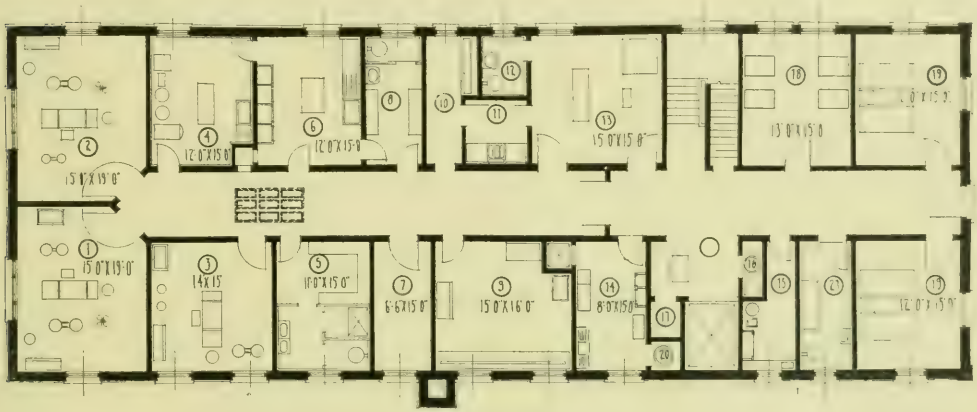
30. Nurses' dining room.
31. Helps' dining room.
32. Resident physicians' room and bath.
33. Superintendent's room and bath.
34. Toilets (women patients).
35. Toilets (men patients).
36. Toilets (nurses).
37. Women's toilet (public).
38. Ambulance entrance.
39. Doctors' toilet and wash room.
40. Helps' dressing room and toilet.
41. Patients' bathroom.
42. Lobby.
43. Vestibule.
44. Nurses' stations.
45. Dish washing.

It may be added that the possibilities of expansion to this type of plan seem admirable. First: the original plan as indicated might be erected in portions, namely: the east wing with service unit; later the west wing, completing the court composition; then the extended east and west wings, as indicated on the plot plan, both units being adjacent to the already completed service groups; later could be added a one or two story unit to the north, providing additional services and increased operating equipment.

For the exterior the Georgian style of architecture was used. It is universally appropriate for all situations with a possible exception of the Pacific coast where the mission style would perhaps meet the environment better.

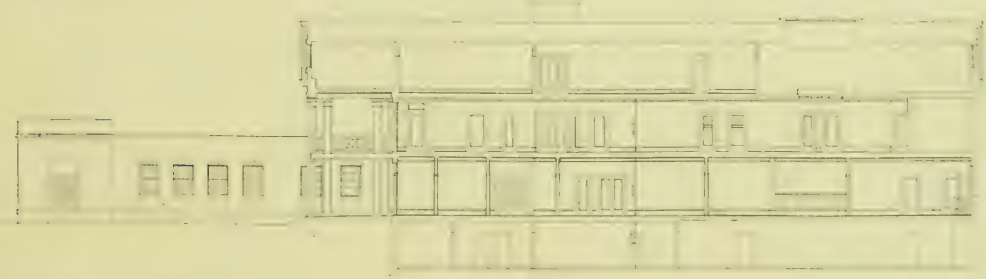
The cost of the building is roughly estimated at $175,000.

LEMUEL CROSS DILLENBACK.



Second floor plan.

1. Operating room.
2. Minor operating room.
3. Birth room.
4. Sterilizing room.
5. Doctors' dressing and scrub-up room
6. Nurses' work room.
7. Anesthesia room.
8. Nurses' dressing room, lockers and toilet
9. Clinical laboratory.
10. Plate storage room.
11. Dark room.
12. Small dressing room.
13. X-ray room.
14. Pantry.
15. Utility room.
16. Janitor's closet.
17. Supply closet.
18. Nursery.
19. Maternity ward.
20. Linen closet.
21. Bathroom and toilet.



NORTH ELEVATION

Requirements of Program

The requirements of the hospital, as stipulated in the general program, were that the building should consist of not less than thirty or more than forty beds and should provide for the following services:

(a) Rooms and Wards

1. Private and semi-private rooms (single and double rooms, some with private baths and water closets) 16-20 beds.
2. Women's ward, 4, 5 or 6 beds.
3. Men's ward, 4, 5 or 6 beds.
4. Maternity ward, one or two 2 bed or one 4 bed.
5. Children's ward, one 4 bed.
6. At least 2 one bed rooms accessible to the wards for recovery and segregation.

The number of private rooms may be more than sixteen but not more than twenty; the capacity of the women's and men's wards may be four, five or six beds, or, one or more additional four-bed wards may be introduced.

There shall be at least 80 sq. ft. of area per bed in the wards for adult patients, and not less than 60 sq. ft. in the children's ward.

(b) Services

There shall be separate services for private and ward patients and at least one complement on each floor, designed for the use of patients.

1. Charting space.
2. Medicine closet and sink.
3. Pantry, 130 to 160 sq. ft.
4. Utility room, not less than 120 sq. ft.
5. Linen closets not less than 50 sq. ft., or linen room not less than 100 sq. ft.
6. Janitor's closet.
7. Supply closet.
8. (Additional conveniences optional.)

(c) Verandas

There shall be at least three separate veranda spaces,—for ward patients, private patients and children.

(d) Operating Department

Operating room, not less than 15 ft. wide and 15 ft. long.

1. Sterilizing room, 180 sq. ft.
2. Doctors' scrub-up room, 65 sq. ft. (may be combined with doctors' dressing room).
3. Doctors' dressing room with lockers and toilet, 100 sq. ft.
4. Nurses' dressing room with lockers and toilet, 100 sq. ft.
5. Nurses' workroom, 180 sq. ft.
6. Anesthesia room, 100 sq. ft.
7. Minor operating room planned to serve as an emergency or delivery room; suitable also for dental, eye, ear, nose and throat and for cystoscopic work, not less than 14 ft. wide and 15 ft. long.
8. Accident receiving and surgical dressing room.
9. Birth room, not less than 14 ft. wide and 15 ft. long.
10. Nursery, 180 sq. ft.
11. X-ray room, 225 sq. ft.
    Dark room.
    Small dressing room.
    Plate storage room.
12. Clinical laboratory, 225 sq. ft.

(e) In General

1. Drug room, 150 sq. ft.
2. Waiting room for out-patients.
3. Treatment room for out-patients.
4. Clinical record room (may be combined with office or visiting doctor's consultation room.)
5. Office.
6. Reception room.
7. Visiting doctors' consultation room, 150 sq. ft.
8. Locker and dressing room with bath for graduate nurses, 150 sq. ft.
9. Kitchen, including facilities for the preparation of special diets.
10. Cold storage room.
11. Storage for groceries.
12. Officers' dining room.
13. Nurses' dining room.
14. Helps' dining room.
15. Resident physician's bedroom and bath, 120 sq. ft.
16. Superintendent's bedroom and bath.
17. Two bedrooms for male help, with bath room.
18. Two bedrooms for female help, with bath room.
19. Laundry.
20. Clean linen room.
21. Boiler room, (but not lighting or power plant) and coal bin.
22. Storage rooms for miscellaneous supplies.
23. Lavatories and toilets, as required.

The buildings should be planned to admit of expansion and the drawings should indicate the direction of this expansion.

It is assumed that the nursing staff will be accommodated outside of the hospital.

For the care of contagious diseases the hospital contemplates building a small isolation cottage. Its inclusion on the plat is optional.

Inasmuch as it is the purpose of the competition to bring out new thought, competitors are free to introduce into the plan elements which they regard as desirable, which are not specifically included in the slated program.

Obviously, provisions should be made for such necessary parts as elevators, stairs, dumb waiters, soiled linen chute, boiler flue.

IN TRIBUTE TO HERBERT BURR HOWARD, M. D.

DR. HERBERT BURR HOWARD died suddenly at Lynchburg, Va., March 6th, 1923. With Mrs. Howard and Dr. and Mrs. Owen Copp, he was returning to Boston by automobile from a trip to Florida when his death occurred. He had suffered from angina pectoris for several years and knew that he might be taken quickly at any time.

Members of the American Hospital Association and readers of THE MODERN HOSPITAL knew Dr. Howard so well that it seems unnecessary to recapitulate his many achievements, but the record of such a life should be in the files of this magazine and, besides, many who knew a part of his work were unfamiliar with other parts.

Was a College Athlete

Dr. Howard was born at Fitchburg, Mass., March 24, 1855, the son of Luther Grant and Sarah Burr Howard. His boyhood was spent in Paxton and Worcester, Mass. He entered the Military Academy at Leicester and was graduated from Worcester High School. From good inheritance and early life on his father's farm he developed into a young man of great physical strength. Nearly twenty years of age when he decided to go to college, he was more mature physically and mentally than most of his mates in the class of 1881 at Harvard College. He was on his class crew for four years and on the University eight his junior year. He withdrew from the crew his senior year to devote more time to his studies.

Dr. Herbert B. Howard

After graduation from college, he went to the Harvard Medical School where he obtained the degree of M. D. in 1884. While he was a student in medicine, the State Almshouse, later the State Infirmary, at Tewksbury, Mass., was under investigation by Governor Butler. The male nurses became frightened and left. The resident physician called upon the medical students for help to care for the patients. Dr. Howard with others responded to this call and so made the acquaintance of the institution with which his early successes in administration were associated.

After his graduation from medical school, Dr. Howard returned to Tewksbury as assistant resident physician. With the exception of two years spent in private practice in Colorado, his active life was spent in hospitals.

In 1891 Dr. Howard was made superintendent of the State Infirmary. He carried out an extensive program of construction and organization. He had under his charge there many insane patients and developed that knowledge and insight into their needs which he used so much to their advantage in later years.

In 1897 the trustees of the Massachusetts General Hospital selected him for resident physician (then the title of the position of superintendent or director). They proposed an extensive program of construction at the general hospital and chose him to plan and carry it out. He quickly grasped the problem and made a plan which is essentially that pursued to this day in the development of this old institution.

Record at Peter Bent Brigham

His success was such that the trustees of the Peter Bent Brigham Hospital naturally turned to him when they were to build an entirely new institution. Dr. Howard resigned from the Massachusetts General Hospital in 1908 to become superintendent of the Peter Bent Brigham Hospital with this responsible and arduous task of construction before him. One of the early questions which confronted him was that of the division of funds between endowment and construction. He determined that the buildings should be of the simplest nature consistent with complete adequacy to the requirement of modern medicine. His object was to save for endowment every penny possible, for he knew better than most men the tremendous costs of maintenance and the difficulties and criticisms that would be encountered if an early appeal for funds was made to the public. The position which he took was no easy one to maintain. Strong forces urged him to large expenditures on architectural effect. His trustees stood by him and the hospital was built in a simple manner. As a result the Peter Bent Brigham Hospital has come through the trying times of the war and the post-war period without an appeal to the public for more money. In fact, now ten years after its opening, the hospital is living within its income. The ward unit which Dr. Howard developed is conceded to be the best. The hospital shows everywhere his thought and the results of his experience used to make patients comfortable and to facilitate the work of doctors and nurses. The organization of this hospital and the selection of its personnel was a great task well performed.

Dr. Howard reached the retiring age during the World War but stuck to his task in spite of fatigue and ill health until in the spring of 1919 the return of another hospital executive from abroad made it possible for his successor to relieve him.

Active Member of State Boards

Dr. Howard was a member of the Massachusetts state board of insanity from its foundation by Governor Murray Crane. When the board found it necessary to establish the State Colony for the Insane, Dr. Howard spent much time in selecting the site. He then resigned from the board to become the first chairman of the board of trustees of the State Colony for the Insane at Gardner, Mass. Here under his wise guidance its first superintendent, Dr.

Joseph B. Howland, planned and built the institution. When this hospital was well established he was again appointed to the state board of insanity and became its chairman.

Dr. Howard was one of the very early members of the Association of Hospital Superintendents from which grew the American Hospital Association of which he was president in the year 1910.

He was married in 1886 to Dr. Margaret Emily Pagelson, then superintendent of the New England Hospital. He is survived by his widow, by their daughter, Dr. Sarah Ernestine Howard, and their son, Charles P. Howard of Reading, a lawyer practicing in Boston and a member of the senate of Massachusetts.

This is an incomplete record of the life work of Dr. Howard. No record is complete without some estimate of his character. Indiscriminate praise is the poorest compliment that could be paid him.

Always Sought Patient's Best Interest

A man of large frame and great strength his frank, friendly face and clear, penetrating eye inspired confidence at once. His loyalty to his friends was an outstanding trait. When he gave his confidence he gave it completely. His broad experience and natural, shrewd Yankee sense gave him great wisdom which was always at the service of bewildered and troubled hospital executive officers and others. Although Dr. Howard's hospitals were models of efficient management, he was old fashioned and never placed "efficiency" above the homely virtues of honesty, humanity and loyalty. "The best interest of the patient" was the keynote of his hospital life. He repeated it often and before it shrivelled selfish plans of those who desired to place other hospital functions above this one. Once assured that the care of the patient came first, his interest was keen in medical education, the training of the nurse and other legitimate hospital activities.

His death affects not only his family and his close friends. Every hospital worker who knew him feels the severe loss. No one can fill his place.

HOSPITAL FIRES ARE NUMEROUS

Hospital fires have formed bases of many headlines in the daily press recently. Although loss of life has been confined to one notable instance, the property loss has been high.

The sum of $40,000 will be asked to replace the hospital building at the New York State Agricultural and Industrial School at Industry, which was destroyed by fire on the morning of February 23. The fire was caused by sparks from the chimney alighting on the roof of the wooden structure. Except for the efficiency of the fire-fighting apparatus and the heroism of the boys, the east wing of the hospital would have been burned, it is said.

In early March fire, originating from defective wiring, caused damage estimated at $5,000 to the Buie Clinic at Marlin, Texas. The same cause was given for the fire which destroyed the Mountain View Hospital at Chesnee, South Carolina, on March 7. Three patients, one on the operating table, were rescued from the building. The building was erected two years ago by Dr. J. B. Cash for $60,000, a part of which is covered by insurance.

At the government hospital at Augusta, Ga., on March 4, fire was discovered under the cook ovens in one of the kitchens. Before it could be extinguished it had caused damage to the new building estimated at $1,000. The building is of stucco construction and was regarded as fireproof.

Mullins Hospital at Mullins, South Carolina, was completely destroyed in a fire on March 8. The institution will be rebuilt at once of fireproof construction.

Fire in the laundry rooms of the County Hospital at Denver, Colo., on March 7 threatened the destruction of the insane ward of the institution and virtually destroyed the laundry building.

Blame for the loss of life in the recent disastrous fire at the Manhattan State Hospital on Ward's Island, New York, in which twenty-two patients and three attendants were killed, was placed on the crowded condition of the wards, by the state hospital commission in its recent report to Governor Smith. Only the replacement of the old-type hospital buildings and the installation of high pressure salt water systems will lessen the fire risks, the report said. More patients than the normal capacity of the building were really removed during the fire before the fall of an old water tank blocked the passage and cut off the escape of the others.

International Newsreel Photo

The ruins of the dormitory in Ward 43 of the Manhattan State Hospital for the Insane on Ward's Island, New York, which was swept by a fire that caused the death of twenty-two patients and three attendants. It was within this dormitory that all the men met their death. An investigation by the state hospital commission placed the blame for the loss of life on the crowded condition of the wards. The old buildings must be replaced by fireproof structures, it has been recommended.

Other recent hospital fires include a small conflagration at Auburn Hospital, Auburn, Neb., which started in the garage; a fire that broke out in the rear of Mignon Hospital at Sylacauga, Ala., resulting in slight damage; and a $30,000 fire at Rochester, N. H., where Dr. E. M. Abbott's Hospital on the second floor of an office building was badly damaged.

NEW CHILD HEALTH ASSOCIATION

The new American Child Health Association, which was formed through an amalgamation of the American Child Hygiene Association and the Child Health Organization of America, has opened offices in the Penn Terminal Building, New York, and will also maintain headquarters in Washington, D. C. The officers of this new association are: Herbert Hoover, president; Dr. L. Emmett Holt, first vice-president; Dr. Livingston Farrand, second vice-president; Dr. Thomas D. Wood, third vice-president; Dr. Philip Van Ingen, secretary; Corcoran Thom, treasurer. Courtenay Dinwiddie is the general executive.

He will always be a slave who does not know how to live upon a little.—Horace.

LIABILITY OF HOSPITAL FOR ACTS OF ITS SERVANTS*

By JOHN A. LAPP, Director, Department of Social Action, National Catholic Welfare Council, Chicago.

THE wrongs for which individuals seek redress consist of two main classes: those which result from a branch of contract, and those which arise from negligence or from wrongs committed, such being generally known as torts.

A breach of contract consists in failing to do something that one has agreed to do, or in doing something that one has agreed not to do. A tort consists in doing something to the prejudice of another which one ought not to do, or doing some rightful act but in a negligent or wrongful manner, time, or place, or by failing to do what ought to be done, thereby causing suffering or injury to another.

Law of Torts Requires Ordinary Prudence

Contracts are quite definite in form when they are written specifically indicating what is or is not to be done. Failure to live up to a written contract is quite easily determined. There are certain forms of implied contracts which are not so definite as a written contract, but which may be fairly easily determined. In the case of torts, on the other hand, there is considerable indefiniteness. When is a man injured in his property, person, or rights? How much is he injured? Is the person who causes the injury chargeable with negligence? What is negligence? All of these represent practical questions that arise in each individual case. The tendency of the law of torts is to give the plaintiff relief only if the defendant was culpable in some way. It must be proved that the defendant intended to damage the plaintiff, or that he might have avoided damaging him by using the proper amount of care, or that he was engaged in an unlawful act at the time the plaintiff suffered the injury. The standard of care required by the law of torts is that of ordinary prudence, whether the amount of care owed is great or small. Negligence is a relative term, and conduct which would be considered negligent in some circumstances might well be considered due care under other circumstances. The standard is that of the ordinarily prudent man under similar circumstances.

It is the purpose of this paper to discuss the subject of liability for negligence, leaving the liability for contracts out of consideration here. We have now to discuss the relationship of the law of prudence to the management of hospitals, and the responsibility which they carry for the acts of their physicians, nurses and other assistants. Three types of hospitals will need to be discussed separately, for the responsibility depends upon other considerations in some institutions than pure negligence. Public institutions have slight liability for the acts of assistants. Private hospitals conducted for profit have very few exemptions from liability for the acts of assistants. Private benevolent or charitable institutions have a limited amount of liability. The distinction among the three is very important.

Public Institutions and Hospitals

Public institutions and hospitals created by the federal, state, or local governments are not liable for damages caused by negligence or incompetence of their officers or employes, unless that liability has been definitely fixed upon by the constitution of the state, or by statutes, or unless that liability has been expressly accepted in the constitution or the law.

The reason for the exemption of public hospitals has been frequently stated in much the same terms as follow, namely: The funds for the maintenance and support of such institutions are appropriated by the state and are made up of sums collected from the citizens by taxation. The purpose of the appropriation is a purely charitable one, that is, to take care of the poor unfortunate ones confined in the institution, and is a governmental duty, and the institution is managed and controlled by the state with that sole end in view. Neither the state nor officials derive any benefit or profit from the funds appropriated for such purposes, and to allow them to be diverted from their sacred purpose to pay judgments for injuries inflicted by employes when acting beyond the scope of their employment, would be contrary to law and public policy, and would in time wreck all the charitable institutions in the state.

The law of master and servant does not apply in such cases. The officers are appointed for the administration of a public benefit and necessity, and are directed and compelled by law to employ persons to assist in the proper performance of the functions of that office. The assistants do not perform their duties as servants of, or for the benefit of, the institution or its board of directors.

A person may sue the individual or officer who is responsible for the negligence, but all that is necessary to do to escape negligence is to show that the officer or individual was acting within the law. If an officer cannot show statutory power to do a certain thing, he will be personally guilty of negligence and liable to the one injured. This rule makes the definite requirement upon officers and employes that they act within the law. It does not offer relief to an injured person even at best, for it would be of doubtful value to sue an individual employe, or petty officer who may be directly chargeable with negligence.

Duties Required by Law

It should not be inferred that any kind of hospital, public, profit-making, or charitable, is exempt from liability placed upon it by the constitution or statutes. Unless the constitution of the state prohibits it, the legislature may place liability upon any type of institution; unless, of course, in the case of a private institution, the charter should be violated, in which case it would be a breach of the obligation of contract. In such cases the legislature could provide liability for all future hospitals, but could not affect those which had a contract in a charter which guaranteed immunity.

Moreover, it should not be inferred that the present standards of liability are fixed, even in the absence of legislation. Courts may change their minds; new decisions become controlling ones, and that which is immune today may be reversed tomorrow by the court; although, of course, it is not likely to happen without impelling reason. The legislature may make and has made hospitals liable for injuries to their own employes, under the workmen's compensation laws. In such cases, all hospitals have the same liability as the industries of the state. Many other instances could be cited of direct obligation placed upon hospitals in common with other enterprises.

*Paper read before the Annual Congress of Medical Education, Licensure, Public Health and Hospitals, March 6, 1923

In the absence of further law, however, at this time, it may be repeated that public institutions are exempt for liability for torts; private hospitals for profit are subject to all the liabilities which similar enterprises are subject to, and that at the very most, charitable hospitals are made liable for negligence, but only when it is proved that they did not exercise due care in the selection of competent help.

Two Kinds of Private Hospitals

Private hospitals consist of two kinds: first, charitable or benevolent hospitals not conducted for profit, and second, hospitals conducted for profit.

What is the liability of each kind of private hospital for the acts of its assistants, particularly its physicians? There is a wide difference in the degree of liability of the two kinds. As pointed out before, a hospital for profit is held to a strict accountability, like other business corporations, while the charitable hospital has a rather large immunity.

When Is a Hospital Charitable

In this discussion we are first called upon to determine when a hospital is a charitable, and when a profit-making enterprise. Much depends upon that point. The decisions of the courts are numerous, but there are certain definite quite universal conclusions. One of these is that the form of incorporation is largely controlling. If a hospital is incorporated for profit under the business incorporation law, with capital stock or other earmarks of the business corporation, it is a hospital for profit, even though it has not made profit, does not make profit, and in the very nature of things could not make a profit. On the other hand, if a hospital is incorporated under the benevolent institution law, or similar incorporation law, it is not a hospital for profit, even though it makes money, creates a surplus, and uses the surplus for the building of other hospitals. This distinction is important—in fact, vital to a hospital's security. Every hospital should look to its charter. Hospitals have been conducted as perfect examples of charitable institutions, without apparently knowing that their charter called for capital stock and had other indications of a business corporation. That such stock was never issued, and that the work done was the purest of charities, did not prevail against the provisions of the charter.

Holy Cross Hospital Case

The following case will indicate the significance of this statement. It was brought in Utah by one Getzhoffen against the Sisters of the Holy Cross Hospital. The action was brought to recover damages alleged to have been sustained by plaintiff through defendant's negligence while he was an inmate of defendant's hospital. It was alleged that the defendant was a corporation organized under the laws of the state of Indiana, and was doing business in Utah for profit. The defendant admitted that it was a corporation organized for the purpose of establishing, maintaining and conducting hospitals for the treatment of sick, wounded and injured patients, but that the hospital was conducted by the defendant solely as a charitable institution and not for profit. The evidence showed that the charter provided for capital stock and the court said: "That the articles upon their face purport to create an organization for pecuniary profit. It has been quite generally held that the nature of the corporation must be determined from its articles of association, and that its character cannot be changed nor modified by parol evidence; that the object and purpose for which a corporation is organized must be gathered alone from the written instruments, and cannot be aided nor varied nor contradicted by testimony outside of the instrument itself."

In another case of similar character in Minnesota, the articles of incorporation provided for capital stock. No capital stock was ever issued, and the corporation depended almost wholly for its support upon contributions from charitably disposed persons. The court ruled that the nature and character of a corporation must be determined from its articles of association, and that its character cannot be changed nor modified by evidence that it was not in fact such a corporation, as its articles purport to make it; that in determining the character of corporations, the articles of association are the sole guide.

Since the hospital for profit escapes none of the risk of negligence, and charitable hospitals have a large immunity, it is highly important for all institutions seeking to come in the latter class, to look to their legal foundations.

Hospitals Connected with Medical Schools

Another class of institutions comprise the hospitals connected with medical schools. In the case of such schools conducted by the state, the hospitals are, of course, exempt from liability. In the case of hospitals connected with institutions conducted under private auspices, or by individual owners, the same rules apply as in other hospitals. The whole question is one of the character of the parent institution—the medical school. If the medical school is organized for profit, or with any of the earmarks of a business corporation, the hospital which it conducts as an adjunct to its training is not a charitable institution, whether it gives its work to charity or not. It has been held in several cases involving privately owned medical schools that such hospitals are conducted for the advantage of the school, and the school being a profit-making enterprise, the hospital cannot be exempt from liability. Again it is important to go back to the original charter of the medical school to see whether or not it was organized technically as a business corporation or as a charitable or benevolent institution. It is possible that in the transition from private ownership to public and quasi-public control, some charters may still retain the evidence of a business organization.

The Kentucky court of appeals summed up the matter the liability of a hospital owned by a private medical school as follows:

"It is manifest from the evidence that the hospital is maintained because it is necessary to the successful conduct of the school of medicine. Without the clinical instruction and the operations by the professors in the presence of the students, the school could not be maintained with success. The hospital is an adjunct, and part of the medical school. Whatever gain may result from the operation of the medical school goes to the owners of the property. While the evidence shows a great deal of charity work is performed in the treatment of patients and in dispensing medicines, still the institution is conducted for profit."

Industrial Hospitals Construed as Charitable

Another class of cases arises in connection with industrial hospitals owned and conducted by private organizations. Curiously enough, in such cases the courts have generally construed that a hospital conducted by an industry for the service of its employes is a charitable enterprise. This line of decisions goes so far as to include among charitable institutions those where a regular monthly contribution is made by the men to provide for their medical and hospital attention. Among these cases to be cited is one by the United States circuit court of appeals, arising out of the claim for damages for mal-

practice of physicians in the Union Pacific Railway Company's Hospital conducted for the benefit of its employes at Denver. The court said:

"The test which determines whether such an enterprise is charitable or otherwise is its purpose. If its purpose is to make profit, it is not a charitable enterprise. If it is to heal the sick, without hope or purpose of getting gain from its operation, it is charitable. Tried by this test, the hospitals and medical department of this company are a great public charity corporation. There is no evidence that there ever was any purpose or intention on the part of the company to make any profit through the operation of this hospital or the supplying of these physicians. The sole purpose that this record discloses was to relieve these employes from sickness and suffering. If it is urged that this gift may have been promoted by an ulterior and selfish motive—that the company may have thought that the operation of its medical department would protect it from excessive claims for injuries resulting to its servants—the answer is that the true test of a public charity is not the notice of the donor, but the purpose to which the money given is to be applied.—*Union Pacific Railway Company vs. Artist, 60, Fed. 365.*

To a similar effect is the case of *Richardson vs. Carlion Hill Coal Company, 10 Wash. 651.* In this case the company retained one dollar per month from the wages of employes for the purpose of providing hospitals and medical service. The court said:

"None of the money was used by the company in practising its business, nor did it in any way profit from it. This hospital was maintained and the physicians provided for the sole purpose of relieving sick and injured employees without expense to them, and without any intention on the part of the company for making profit out of the undertaking. It was, thérefore, a charitable institution, and it was supported by the contributions of employes, and carried on in their interest."

In another case (*Eighmy vs. Union Pacific Railway Company, 93 Iowa, 538*) where the court said:

"A railway company voluntarily furnishing a hospital for the treatment of its employes in case of injury is not liable, provided it employes competent surgeons."

Question of Liability

We return now to the question of liability of profit-making and charitable institutions. Briefly, it may be said that in the case of profit-making institutions they are liable for the mal-practice of physicians employed by them for all of the reasons that a physician might be liable for mal-practise in his own private practice plus all of the liabilities of a business enterprise. The physician being the servant of the hospital in such cases, the rule of law is that the superior is responsible. A different question arises when the physician is not employed by the hospital but brings a patient to the hospital. Not being an employe, the hospital is not liable for his negligence. The patient must seek redress for negligence against the physician himself.

When we consider the charity hospital, quite a different rule applies. In a few states, notably Massachusetts, charity hospitals are entirely exempt from liability under the present court decisions. No matter how much negligence may be chargeable to an employe, the hospital is not liable. In the case of a private physician treating a patient in such hospital, the physician alone would be liable for negligence. At the other extreme of cases relating to charitable hospitals is the recent Ohio decision, which places definitely upon the hospitals the requirement that they select their employes and assistants with due care. If such employes and assistants are selected with due care, there is no liability, but if they are not selected with due care, the hospital becomes liable. This latter doctrine will be likely to be the ruling one in the future for charitable institutions. It does not, however, place heavy liability upon the hospital. All that is needed is reasonable care in the selection of assistants. If a hospital selects a physician, nurse, or attendant, with knowledge of his incompetence, the hospital would be liable. It would also be liable if it retained such a person after his incompetence had become known. A person subject to epileptic seizures employed to run an ambulance or an elevator would make the hospital liable for his acts. A nurse or attendant suffering from some communicable disease, hired by a hospital, would make the hospital liable for consequences.

May Bring Physical Exams of Employes

How far this doctrine will require hospitals to make physical examinations of their employes is not certain, but it is a reasonable requirement that they should make such examinations or be liable for the consequences. How far does this rule apply to physicians? A hospital has a right to assume that a license to practice medicine, given by the state, is sufficient to warrant employment, and in the absence of any knowledge to the serious detriment of such physician, the hospital ought not to be held liable. If, however, there is evidence which, through a reasonable degree of care should be in the possession of the hospital managers, that a physician licensed to practice is incompetent, then the hospital ought to be held liable for his acts.

Should the hospital be liable for physicians whom it selects on a closed staff? Probably so, if the physicians on such staff are selected by the trustees, or with their approval. If a staff physician operates upon a charity patient who is the patient of the hospital, then the hospital should be liable, unless such physician were chosen with due care. In the case of private patients brought to the hospital by a member of the staff, the liability should rest with the physician himself.

The problems are much more difficult to contemplate in the case of a hospital with an open staff. So far as the patients of the hospital are concerned, there would be the same relationship as in the case of the closed staff, namely: That there would be liability if the hospital permitted a negligent physician of notorious incompetence to injure the patient. In such cases it would appear that the physician acts as the servant of the hospital. In the case of private patients brought to the hospital by a physician and treated as such, there should be no liability upon the institution.

SCHOLARSHIP FOR 1922-23 GRADUATE

To interest nurses in college and postgraduate courses, *The Trained Nurse and Hospital Review* has offered a $200 scholarship to a nurse graduating from an accredited school between July 1, 1922 and July 1, 1923.

This scholarship will entitle the nurse to a year's study in some college or university, with opportunity to specialize in pediatrics, dietetics or any special field, or to study public health nursing in one of the large nursing centers. Her school advisers and the scholarship committee will aid the nurse in selecting the best environment for study.

The award will be made by a scholarship committee composed of representative nurses on the following bases: standing of the applicant in her class; standing among other graduates of the state as represented by state board averages; estimate of fitness furnished by applicant's superintendent of nurses; estimate of fitness based upon the committee's grading of a 3,000 word thesis on a phase of the subject in which the applicant desires to specialize.

RECENT LEGISLATIVE PROPOSALS AND JUDICIAL DECISIONS

By DOROTHY KETCHAM, Ann Arbor, Mich.

THE legislative proposals and enactments of a given year are not for the most part available for current publication. The number of bills introduced is in no way indicative of those which will pass. Some may be termed purely personal, others are much more comprehensive in character.

The following bills introduced into the Michigan legislature are cited only as typical. It is practically impossible to publish a current comprehensive index of such proposals for all states without the organization of a complicated and expensive machinery beyond ordinary means. Upon the publication of laws, from six to nine months after the close of the session, it is simpler to ascertain the legislation of interest to and affecting hospitals.

Michigan House Bill 269 amends the act permitting counties to establish and maintain public hospitals. A second bill SB 205 relates to the election or appointment of trustees or directors in certain hospitals requiring that "not less than one-fifth of the total number of such trustees or directors shall be experienced physicians or surgeons and graduates of a reputable college or school of medicine." It is provided, however, that no physician or surgeon who is a member of the staff shall serve as a trustee or director.

Would License Laboratory Workers

SB 150 was introduced to prohibit the maintenance of hospitals, nursing homes and places of refuge within 1200 feet of any public school.

One proposal, SB 131, provides for the examination, licensing and registration of persons engaged in laboratory work. Standards for the qualifications of the chemical pathologist, serologist, bacteriologist, chemist, laboratory assistant and technician are stated. A laboratory assistant is required to have a recognized high school diploma or an equivalent credential and two years of college training in sciences, preferably those embracing the fundamental medical sciences, i. e., histology, physiology, physiological chemistry and bacteriology, or two years' experience in a recognized clinical laboratory.

The problem of exempting hospital property from taxation is a difficult one involving a number of different factors. When the constitutional provision permitting exemption is of general character, then the legislative enactments may still establish some limitations. The proviso may be made that the property of hospitals *necessary for the use* of such institutions shall be exempted from taxation and buildings or houses appurtenant thereto.

Would Limit Tax Exempt Hospitals

A proposal in Michigan, HB 276, proposes to limit those classes of hospitals which are exempt from taxation and certain conditions of exemption are prescribed. First, "unless such hospital admit as patients *any* and *all* persons making application therefor in a suitable or proper manner, and who shall offer to pay the fixed charge and expenses for care, treatment, medical or surgical attendance, in all cases where there shall be such vacant space or facility therein as may reasonably be required for the same—." It is provided, however, that treatment for disorders or diseases "for which the hospital does not provide the necessary adequate facilities" does not come within the provision of the law. Secondly, the hospital must permit each person admitted to be attended or cared for by his own physician. In the third place, the hospital must render a certain proportion of its services for charity, that is, not less than six per cent of the total number of persons admitted to such hospitals as patients.

This last bill has been introduced in somewhat similar form into other legislatures. On the face of it, it can scarcely be defended. Perhaps the outstanding difficulty is evident in the provision for an open staff. If a hospital is legally bound to exercise due care in the selection of its servants, then the promiscuous admission of any person practicing precludes the possibility of careful selection and control of clinicians.

Taxable Exemption of Church Properties

The problem of the taxable exemption of certain properties was passed upon recently by the supreme court of Illinois. It is pointed out by the court that all property is subject to taxation, except such as the constitution exempts.

The title to certain property on April 1, 1921, was in a Catholic church organization of Centralia, which organization was incorporated November 28, 1919. Prior to that time the title had been in the bishop of the diocese. On April 8, 1922, the hospital was organized as a corporation, and the hospital property turned over to it by the church organization.

From the records it was shown that, following public subscriptions, the hospital was constructed in 1908. The organization was conducted under the care of Sisters, known as Poor Handmaids, who take all the sick that are brought, no matter of what color or means. Various amounts are charged according to the ability to pay. The state contended that the hospital property was property of the church not used for religious purposes, and that when charges were made for its use by "the charitable institution without profit," severed from its relation with the church, it is subject to tax, the same as a tenement house or church parish used for religious purposes.

It has been held in a number of cases that in order to be exempt from taxation because used exclusively for religious purposes, the property *must, in fact, be used for such purposes.* Under the recent case of *People vs. Muldoon* it was decided that certain property was not held at the assessment of these particular taxes for religious purposes, and therefore the property could not be exempt. To be exempt the property must come clearly within the provision of the law, or in other words any tax exemption, statute or provision, will be strictly construed.

The further point was raised that as a matter of right and justice the property should be exempt because, while at the time of the levying of the tax it was owned by the church organization, it was equitably owned by the hospital organization. Under a previous ruling, *People vs. Toulon, 133, NE. 707,* the property was held not to be exempt.

The court in the Muldoon case, referred to above, held that a monastery of Catholic nuns, who have renounced all the affairs of the world and all connection therewith

and are devoting their lives to prayer and worship, was *not* exempt from taxation as a "place used for religious purposes" because the primary use was that of a residence. The fact that there are a number of nuns engaged in prayer and meditation and following the same practices of penance and contemplation is of no importance, since the number so engaged does not make that purpose a religious one which otherwise would not be. The nuns have no relation, near or remote, to the public, but are completely separated and secluded from the world, and are not in any manner connected with public worship, religious instruction, or public religious observances. There is no ground upon which this property can be placed on a different footing from the residence of a priest, rector or pastor, and it is settled that such property is not exempt." *People vs. St. Mary's, 137, NE 865.*

To Admit X-ray Photos as Evidence

The problem of admitting x-ray photographs as evidence was recently passed upon by the supreme court of Illinois. As in the case of camera pictures, x-ray plates must be verified as a true representation of the subject seen. "Like other photographs, they cannot be received as evidence until proper proof of their correctness and accuracy is produced. . . . . It must be established by competent evidence that the picture portrays the condition it purports to represent before it has any place in the case. Some witness must be able to testify that the picture offered in evidence shows accurately what the witness saw when he looked into the body with the fluoroscope or he must be able to say he is skilled in the use of the x-ray machine and in the taking and developing of x-ray pictures, and that he took the picture offered in evidence with the body in a certain position (describing it), with a machine which he knew to be in good working condition and accurate, and that from his experience he was able to say that the picture produced by the machine was an accurate picture of the internal condition of the body." These methods of establishing the accuracy of the picture are not exclusive, but, whatever method is used, its accuracy must be established before it is admitted.—*Sevents vs. Illinois Central Railway Company, 137, NE 859.*

Judgment Against Hospital Society

The action, which was determined by the supreme court of Oregon, February 13, 1923, was brought to recover for money expended for medical and surgical treatment and hospital services while under contract with the defendant to furnish the same. The plaintiff was to pay a certain sum monthly for which certain services would be supplied. It seems that October 26, 1919, the plaintiff became ill and consulted Dr. Gillespie of the National Hospital Association. He received some pills and was advised to return in a few days. Later he returned saying he was a little better and that his back seemed "the main trouble." After trying to return to work and being unable to secure the services of the association's physician he secured another physician who took him to a hospital and operated, the fee for services being $211. The patient's wife repeatedly notified the association of her husband's need for attention but received no service from them. From the testimony the court held that the jury "had a right to find that the defendant hospital association had refused to abide by the terms of the contract hereinbefore set forth." A number of technical points of law were raised which will not be here reviewed. The decision of the circuit court was affirmed.—*Reed vs. National Hospital Association, 212 Pac. 537.*

Proposed Hospital Not Held a Nuisance

A suit was brought February 6, 1923, before the supreme court of Wisconsin to restrain the erection of a veterinary hospital. The court pointed out that a veterinary hospital was not a nuisance *per se* and refused to issue an injunction restraining its erection. "The general rule is that an injunction will only be granted to restrain an actual existing nuisance, but where it can be plainly seen that acts which, when completed, will certainly constitute or result in a grievous nuisance, or where a party threatens or begins to do, or insists upon his rights to do, certain acts, the courts will interfere, though no nuisance may have been actually committed, if the circumstances of the case enable the court to form an opinion as to the illegality of the acts complained of, and the irreparable injury which will ensue."

It was shown that every precaution to render the building sanitary and inoffensive was being taken.—*Wergen vs. Voss, 192, NW 51.*

Liability for Acts of Patient on Parole

The liability of the state was called to question before the supreme judicial court of Maine, February 9, 1923. It seems that on May 9, 1920, certain buildings were destroyed by a fire kindled by a former patient at the Bangor State Hospital for the Insane. The superintendent of the hospital is employed by the state and has general supervision of the inmates. It was shown that the patient at the time of commitment was suffering from dementia praecox, paranoid type. On April 25, 1920, he was temporarily allowed his liberty and given into the custody of Bessie M. Stanchfield, who was not a suitable and proper person to have the care and custody—a fact which Dr. Hedin knew or by the exercise of ordinary prudence should have known.

The action was brought against the defendant state in accordance with a legislative resolve authorizing the same. The various technicalities of law will not be discussed here. Negligence is defined as consisting "in the failure to observe that degree of care which the law requires for the protection of interests likely to be affected by the want of it. It is shown also that a person adjudged to be insane is presumed to continue as such until it is shown that sanity has returned." The question is raised as to whether Dr. Hedin was negligent in granting parole. "While the statute law provides that the superintendent of an insane hospital may permit any inmate thereof to leave such institution temporarily in charge of his guardian, relative or friend, or even by himself, for a period not exceeding six months, yet reason and good sense demand that such permission should not be given if the safety and welfare of the patient, or the community at large, are to be jeopardized by such permission. And it equally follows that the degree of care to be exercised in giving such permission should be commensurate with the particular nature of the patient's mental affliction and the possible or proportionate risk consequent upon his enlargement. There was evidence, if credible to the minds of the panel to sustain the view that Stanchfield was a dangerous man to be at large, that a reasonably prudent man—would not have paroled Stanchfield after so short a term of confinement. Parole under these circumstances must be regarded as an abuse of discretion."—*Austin W. Jones, vs. State, 119, Atl. 579.*

THE INFORMATION DESK

No satisfactory solution to a problem in your hospital is too trivial to pass on to other workers in the field. No question that perplexes you is too small to bring to the attention of those with greater experience in the field. This department is the readers' exchange, and its usefulness is dependent upon the measure in which its readers share their problems and their discoveries.

SOME SUGGESTIONS FOR NATIONAL HOSPITAL DAY

"Let us not forget in planning for National Hospital Day that the purpose of all hospital service is to alleviate pain and suffering," writes a correspondent aptly. "Let us not make of it a hilarious show, but an impressive, uplifting and educational ceremony that will cause the public to be thankful for the continued and successful application of our best thinkers and workers in the medical, surgical and nursing professions. Let us not lose sight of the sacrifices which have been made and are being made daily to reach a higher and nobler plane of service to those unfortunately afflicted by disease or mishap. The benefits we are privileged to receive in the care of the sick represent human sacrifice bravely, ungrudgingly and devotedly given. Let us make it a day of cheer for the sick, indeed, but with a sense of thankfulness and appreciation.

"Let us be careful that we keep uppermost in our minds and create in others an appreciation of the wonderful benefits available, thus broadening the 'hospital idea' in our communities and engendering a high regard for and complete confidence in our institutions for the sick.

"Let us not forget the original spirit and worthy aim back of the National Hospital Day idea which caused it to appeal to superintendents, resident and visiting physicians and surgeons, nurses and other executives who are giving of their best without thought of personal or monetary gain, but who wholeheartedly cooperate in an endeavor to obtain the appreciation and support of the substantial members of their communities on the basis of service."

ROTATION OF BROOMS

How a North Dakota hotel has effected a great saving in the replacement of brooms is told in a recent issue of *Hotel Management.*

The housekeeping department of this hostelry passes all the brooms through several departments before they are finally discarded. For example, brooms which are no longer suitable for use for sweeping rugs and corridors are sent to the kitchen; when they have outlived their usefulness in the kitchen they are relegated to the storeroom; when the storeroom discards them they are used on the concrete floors of the basement or on the sidewalks.

Before the brooms are at length thrown away, the handles are cut off, two or three of them are joined together and they are used for sweeping ceilings. With such systematic rotation, the item of brooms no longer fills such an important place on the expense list.

POWER PLANT RECORDS

Superintendents recognize the value of record keeping, but few of them have applied the practice to the hospital power plant. Accurate records of the daily performance of the power plant are essential to economical operation, says Henry Kreisinger in a technical paper recently issued by the U. S. Department of the Interior. By the study and comparison of such records any excessive losses can be found and proper steps can be taken to reduce them.

Some of the items of which records should be kept are discussed in the order of their importance and the ease with which records can be obtained.

(1) *Weight of Coal.*—Every boiler plant should record the weight of the coal burned. Each wheelbarrowful or cartload should be weighed as it is delivered to the firing room. If a boiler plant is operated at night the weight of the coal burned during the night should be determined separately, for it is at night when boilers are run with a light load that coal is burned most wastefully.

(2) *Weight of ashes.*—The fires and the ash pits should be cleaned at regular periods. When the ashes and clinkers are wheeled out they should be weighed and their weight recorded. Comparison of the weight of the refuse with the weight of coal burned gives valuable information as to the ash content of the coal.

(3) *Power developed by engine.*—If the steam is used only to generate electricity the net useful power developed by the engine can be obtained by a recording wattmeter. The weight of coal burned per kilowatt hour can be determined by dividing the pounds of coal burned by the kilowatt hours generated.

(4) *Weight of steam used for other purposes.*—The weight of steam used for other purposes than generating power can be determined by placing a recording steam meter in the line. Steam meters can be bought that are reliable to within less than five per cent.

(5) *Condenser vacuum.*—The average condenser vacuum should be recorded each day. The vacuum greatly affects the efficiency of the engine and must be considered when comparing the rate of coal consumption on different days.

(6) *Carbon dioxide in flue gases.*—The percentage of carbon dioxide in the flue gases indicates the amount of air used in the combustion, and the amount of loss in the chimney gases; therefore, if at all possible, a record of the

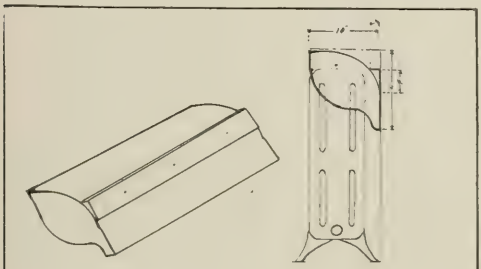
carbon dioxide should be kept. Carbon dioxide can be determined with an automatic CO_2 recorder or by analysis, with an Orsat apparatus, of an average sample collected during a day or half a day.

(7) *Weight of water fed to boiler.*—With a carefully weighed and frequently tested water meter placed in the feed line the weight of water fed to the boiler can be closely determined. By dividing this weight of water by the weight of the coal burned, the evaporation for each day can be computed.

(8) *Temperature of feed water.*—The average temperature of the feed water should be recorded daily. Every 10 degrees drop in the temperature of the feed water increases the coal consumption about one per cent.

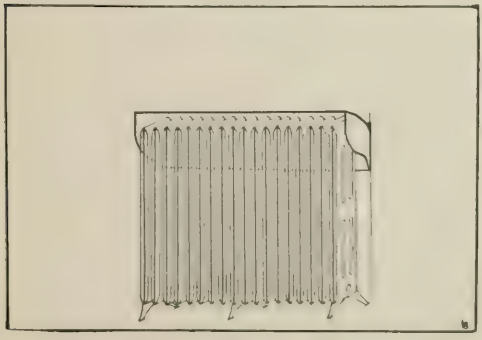
NO MORE DUST ABOVE RADIATORS

Michael Reese Hospital, Chicago, has solved to the satisfaction of its administrators the problem of dust deposits above its radiators.



AN EFFICIENT RADIATOR COVER.

Radiators that were placed in a room close to a bare wall invariably would collect all the floating dust in the room and carry it with the heat currents to deposit it on the wall above the top of the radiator. To overcome this, the hospital tried several standard radiator covers, but none of them seem to offer the correct solution to this particular problem.



Finally it was decided to design a radiator cover which would fasten, not to the radiator, but securely to the wall, thereby diverting the heat currents, laden with dust, back to the center of the room. Almost all of the radiators in the hospital are now equipped with the special cover which is said to accomplish its purpose admirably.

HOSPITAL USES OF AMMONIA

The familiar household ammonia has a multitude of uses in the housekeeping department of the hospital. Dr. Alice M. Smith of Tacoma, Wash., has listed some of its hospital uses in a recent issue of *The Trained Nurse and Hospital Review.* Among them are the following:

Soak paint spots with equal parts of ammonia and turpentine. Repeat two or three times and wash out in soapsuds.

In removing machine grease spots, where the colors of the fabric would run, use a solution of cold water, ammonia and soap.

If too much blueing has been used in laundrying, add ammonia to the water, and it will bleach out the excess blue from the clothes.

Carpets, oilcloth and linoleum may be cleaned with a little household ammonia added to the water.

To remove varnish one quart of ammonia to six quarts of water may be used. Moisten the varnish in the solution and then scrub with a stiff brush.

To clean painted woodwork, use one tablespoonful of ammonia to one quart of hot water. Apply with a cloth without scrubbing. It cleans the surface easily and does not weaken the paint. For a hard-finished wall, use ammonia in proportion of four ounces to four gallons of water.

Ammonia and chloroform, equal parts, will remove old paint from wood.

Add ammonia to warm water and use for washing windows; polish with newspaper. A few drops of ammonia in water applied with a cloth will remove fingermarks from windows or mirrors.

Sapolio dissolved in household ammonia and applied with a cloth to bath tubs will remove stains and dirt. Marble can be cleaned with a strong solution of ammonia in water.

A solution of sodium bicarbonate, ammonia and warm water is excellent for cleaning hair brushes. Rinse in cold water to stiffen the bristles and dry—bristles down—in the air.

Diluted ammonia mixed with flour to a stiff dough may be rubbed on wall paper and pictures to clean them.

Gold and silver articles may be laid in aqua ammonia for a few seconds and then brushed with a soft tooth brush dipped in wood alcohol. Shake dry in clean fine sawdust. Another method is to make a thin paste of powdered chalk and ammonia. Smear over the articles and let dry. Brush off with a dry soft brush. For tarnished silver, use a paste made of ammonia and whiting. Rub the pieces with a cloth dipped in this paste and polish with a dry flannel cloth.

SPECIAL PAD FOR FIRST DRESSING

In place of gauze for the first dressing before the patient leaves the operating room, the Onondaga Hospital, New York, applies a sterile pad, especially designed for the purpose and held in place by adhesive plaster, says *The Trained Nurse and Hospital Review.* These pads are rectangular in shape and vary in size to suit the occasion, being very small and thin for face and scalp work, and larger and thicker for neck, chest and abdomen. They are made to fit any kind of incision, whether drained or closed.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
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PAST AND PRESENT SOURCES OF SUPPLY FOR STUDENT NURSES

IT REQUIRES patience, and still more patience, plus courage of a high order, to listen to the glowing descriptions of the nurses of the good old days that are so frequently held up to us as shining examples of what present-day nurses ought to be and are not.

Apparently these nurses were good-looking, amiable, tactful, obedient and industrious to the nth degree, willing to work long hours, always satisfied with such living and working conditions as the hospital was able to provide for them, always cheerful, and last but not least, imbued with a proper reverence for their superior officers (and apparently there was no dearth of the latter). Probably every reader of this article has listened to such enconiums and can add a few additional virtues to round out the picture of this ideal creature.

How happy and carefree the managers of hospitals in those good old days must have been, for we are told there was never any shortage of these paragons! On the contrary, it appears as if they were clamoring for admission to nursing schools, for the annual reports always included figures showing that hundreds applied for admission, and only a pitifully small number *were chosen*. The writer remembers an eloquent commencement address that elaborated on this theme, emphasizing the rigid selection exercised in admitting candidates to nursing schools and the rigorous testing and weeding out of the unfit that went on all during the years of training, so that it was safe to assume the graduate students were indeed a superior group that measured up to very high standards.

Sources of Supply Always Taxed

There is much reason to believe that the figures quoted in annual reports were misleading, not intentionally so, but nevertheless they were so, because *letters of inquiry* and *applications for admission* are not quite the same, and it was the former that were usually counted. Then too, we question the severity of the *weeding out* practiced in the majority of schools. Every honest woman who has had even a limited experience as principal of a school of nursing realizes the truth of Miss Nutting's statement, that even back in the good old days at Johns Hopkins she retained every applicant that could possibly be developed into a nurse and had no surplus of sub-standard or rejected applicants to refer elsewhere.

However, the purpose of this article is not to discuss these questions but rather to examine into the sources of supply, i.e., to find out if we can from what classes, strata, or groups the nursing schools drew their students, for despite all that is said about higher standards of admission and education, every principal knows to her sorrow, that the immature children applying for admission today are totally different from the mature, well-balanced and well-educated women that sought admission thirty years ago. Those of us whose experience goes back so far know how gradually but definitely the types have changed and how this change has been reflected in increased difficulty in every department of our work. Indeed a generous share of our troubles today is due to the fact that the Nightingale system was planned for women of mature growth (twenty-three to twenty-five) and we are now dealing with eighteen-year-old girls, and in some instances birth certificates might show even this age had not been attained. It is true we still have a few applicants of mature years, but very few indeed, and from all that can be learned the number is steadily decreasing.

The oldest school of nursing in this country has recently celebrated its fiftieth anniversary, and several other schools are nearing the time for similar celebrations. Inquiry among the early graduates of these schools brought out two striking facts. First in those good old days the gainful occupations open to women were very few. Always one finds marriage at the head of the list, then teaching. But there is abundant evidence that many capable women were not successful in securing husbands to support them, nor teaching positions to fill. Consequently, there were many "unclaimed blessings," as they were called by their friends, or varied and colorful names by those who were not friendly. However, these maiden aunts were very useful members of society, and today many of the problems of family life are much more difficult to meet, just because there are no maiden aunts to nurse the sick, meet emergencies, serve as substitutes, and do all the other unclassified things that maiden aunts seemed specially provided to do. To this great army of unmarried women nursing made a tremendous appeal, because it opened up opportunities for independent careers, and it was an easy transition from the nursing that filled much of their time in the homes, to the nursing in the hospitals. Added to this there was in many instances a strong flavor of religion or of romance that helped to put a halo around the head of the venturesome woman who attempted "such noble, self-sacrificing work."

The success of the early schools, and even more the opportunities that opened up for the early graduates of

these schools, were so striking that for a period *nursing* made an irresistible appeal not only to women in the homes, but also to members of the teaching profession. There was a period about thirty years ago when entering a nursing school was really quite the proper thing to do. In other words it was stylish, and that means a seal of approval that is sadly lacking today. True, the immediate members of the family might have objected—they usually did—but nevertheless they were very proud of the initiative and courage shown by those who persevered. It was very unusual to hear of a student nurse becoming discouraged and giving up her work. That did not fit the ideal at all, and the hospitals benefited greatly by these conditions.

Moreover, the monetary returns were better than they are today. Despite all we hear of the profiteering done by nurses and the high prices charged by them at the present time, the truth of the matter is, the fees charged thirty years ago had a much greater purchasing power than the higher fees charged today. In many instances nurses were more highly paid than teachers or any other class of women workers. "At the present time," to quote Dr. Beard, "plumbers, steam-fitters, carpenters and bricklayers draw quite as high wages as the nurse."

It was during this period that numbers of Canadian women entered American schools, and the schools in the north drew heavily from our own southern states. Year after year prominent schools had their classes filled by Canadians and Southerners, with few if any students from the city in which the school was located. Many principals were opposed to admitting students whose homes were conveniently near the hospital. Such a happy arrangement was not conducive to the spartan endurance that was an ideal of those days. Then too, many hospitals, particularly the state hospitals, benefited tremendously by the influx of the better type of English, Irish, and Scotch girls who came to this country in such numbers. They were a sturdy, dependable, adaptable type, with a fundamental education that was sound and thorough so far as it went, and a fund of cheerful optimism that helped them to surmount many difficulties. Only those who have worked with this group realize how valuable they were, or how much they contributed to the upbuilding of many types of institutions.

Regardless of where they came, practically all of the women entering nursing schools were from homes where they had been accustomed to do their share of the work. An outstanding ideal of those days was that young women should be educated to be good housekeepers, including the arts of cooking and sewing. Consequently they were skillful with their hands, and took very readily to nursing tasks.

All Occupations Now Open to Women

Compare these conditions with those of the present day. First, how many occupations are open to women, or a better way to put it might be—how few are not inviting and offering inducements to women to enter? Secondly, girls do not stay at home to develop into maiden aunts willing to carry the family burdens of housework and nursing. On the contrary it is quite as customary for the girl to fit herself to earn her own living as it is for the boy and if the maiden aunts render help it is more often money than service. Thirdly, Canadian and southern girls enter hospitals near their own homes, because the hospitals and schools in both Canada and the south have made such tremendous strides that they compare favorable, indeed in some instances have outstripped, some of the older hospitals and schools of the north and east, a task rendered easier by the willingness of some of our older institutions to rest on their laurels, and bask in the reflected glory of a reputation earned years ago. At the present time there is no incentive for a Canadian or a Southerner to incur the expense and adjustment incidental to entering a school remote from her own home. Fourthly, the type of immigrants is strikingly different from what it was even fifteen years ago. The present tide of immigration is almost entirely from southern Europe, from the Latin countries where nursing is looked upon as suitable work for a religious person or a Magdalene, but not as a professional career worthy of the best type of young women.

So strong is this attitude that it carries over to the second and third generation born in this country, as anyone will find who will take the trouble to talk to a group of this character in any of the high schools located in sections where these people predominate. It is disconcerting—extremely so—to encounter this attitude, unless one is prepared for it and able to meet it. Just here an amusing incident comes to mind. A hard-working Italian tailor in a very unpretentious shop was telling the writer of his daughter's graduation from high school and of his desire for her to go to college. It was suggested that she should enter the five-year nursing course, and the indignation of the old man was pathetically funny. His daughter for whom he had worked and saved in order to give her an education, become a nurse! It would be disgraceful! After much careful explaining he ended by shrugging his shoulders and stated that Italians did not think that way. And yet this man has known and worked for many nurses for years!

High School is Chief Source

All of this seems to indicate that the only available source of supply for the nursing schools of today is the young women of the community which any given hospital serves. And because the number of girls completing high school is steadily increasing, and the average girl finishes high school at eighteen years of age—which to the horror of some of our older principals is the prevailing entrance age to schools of nursing—it would seem that the high school girls are the ones we must draw upon in sufficient numbers to meet the needs of the community not only for hospital service, but for all the graduate work required. By this it is not meant that graduates of other types of schools of equal grade should be disregarded but, by and large, our main source of supply is the high schools. In several cities it has been found that the number graduating from high schools each year and the number required to fill the classes of the nursing schools bears the relation of ten to one. Hence the problem in these cities (and I believe the same will be found true in other cities) is to attract one-tenth of the high school graduates to the nursing schools. How is this to be done?

Unlike our predecessors who scorned the applicant whose home was near the hospital, we are going into the high schools presenting the opportunities in the nursing field, and having what we offer compared with what the representatives of other professions, vocations, and commercial life offer. Those who have tried to do this know that an average group of high school students can be rather sharply divided into two groups: (a) those who are seeking work of any kind provided it brings in what they consider big monetary returns; and (b) those who are seeking further education and preparation for some definite kind of work. Nursing always appeals to the maternal instinct in all girls and usually a fairly large number is interested and seeks further information. Naturally the girl seeking an immediate monetary return can-

not consider it, for even the nursing schools that have doubled the allowance paid student nurses offer a pitifully small sum in comparison with the amount which can be earned in many other kinds of work.

Must Make Educational Appeal

To the second group nursing makes a very definite appeal providing it is put on an educational basis. To my thinking it is this group to whom we must appeal and from which we must draw our students. No amount of earnest seeking discloses any available group of young women comparable to the maiden aunts of forty, thirty and twenty years ago, or the better type of immigrant girls from northern Europe. Neither does earnest seeking disclose any group willing to accept hard work, long hours, and unsatisfactory living conditions just for the privilege of serving the needs of the hospital. Even a religious appeal does not seem as potent as of old, for one finds many appeals for additional candidates for religious orders that have survived many centuries and today are seeking for new members.

Does this mean that the girl of today is more selfish and less willing to serve than the girl of long ago? Most emphatically *no*, but she is very different, actuated by different ideals, and living in an entirely different environment. She is seeking to fit herself for the fullest, most satisfying and most adequate life. She wants the best preparation she can get, and then she is capable of rendering the highest type of service and living up to the loftiest principles of self-sacrifice. But she will do her own choosing and sacrifice herself according to her own ideals, not according to the ideals that dominated Victorian England when Florence Nightingale founded the first school in St. Thomas' Hospital, London. Of course these same ideals dominate a great number of our nursing schools today. In other words the ideals of the young woman of today are totally different from what they were even before the war, and there is no greater prospect of a return to pre-war ideals, then there is of a return to pre-war prices.

Girl of Today Seeks Self-Development

Without question the girl of today seeks self-development first. Accordingly we must put the emphasis on education and make the educational content of preparation for the nursing profession as rich and satisfying as that of any other profession. Just recently a woman of rich experience as the successful principal of one of our best schools of nursing said, "She who chooses nursing is in all essentials a young woman of her time." Some people forget this and waste valuable time bemoaning the difference between the girls of today and the girls of long ago. After all the girls of today are the ones we have to work with, and our problem is how to present nursing to them, and how to educate them to become the best and most adequate nurses possible.

FAVORS FEDERAL HOSPITAL BUREAU

In several recommendations accompanying its report on the provision of hospitals for war veterans made to the Sixty-sixth Congress, the White Committee, composed of four consultants on hospitalization, favors the establishment of a federal bureau of hospitals. This report of Drs. William Charles White, Frank Billings, George H. Kirby and Mr. John G. Bowman covers the complete program of these four consultants, some historical facts of interest regarding the hospitalization of ex-service men in this country, and the following recommendations:

1. The hospital problem of the United States is of sufficient importance to the country to be a subject of continuous study in some office of the federal government.

2. Such office should keep a record of not only the hospitals of all departments of the government, but all state, municipal, and civil hospitals, and should have charge of the preparation of charts showing location, size, character, and use.

3. Such office should be the center of advice on (a) location of hospitals; (b) expansion of existing hospitals; (c) the preparation of standard plans for hospital buildings of different types, and for auxiliary buildings for power plants, kitchen, mess hall, storage, and recreation; (d) standards of equipment; (e) standards of personnel numbers and quarters; (f) comparative costs of construction, maintenance, and operation.

4. Location and enlargement of hospitals should be based on such sound principles as (a) movements of population; (b) functions of government; (c) future use of buildings; (d) railroad facilities; (e) medical and nursing facilities; (f) federal relation and assistance to state, municipal, and civil health functions, especially in the matter of education of technical agents; and (g) uniform care of the citizens of the United States; and not upon the influence of individuals or local interest.

5. Standards for construction, equipment, and personnel should be changed from time to time as knowledge grows and conditions alter. If these were kept up to date they would be of great economic value, not only to the United States government but to the various state and municipal governments and to private institutions.

6. It is apparent, as a result of this period of hospital construction by the United States government, that there will be a greater number of hospitals than can be utilized for the purpose for which they were built. Their future economic use should be a matter of constant study. To abandon them, to maintain them below a certain percentage of occupancy, or to put them to a use for which they are not adapted will be wasteful. There are, however, three avenues of disposition which suggest themselves when use for hospitalization of war veterans is no longer necessary: (a) The transfer to the National Home for Disabled Volunteer Soldiers to be used for domiciliary care, for which the hospitals are admirably adapted; (b) the transfer to the U. S. Public Health Service for marine hospital bases, especially in the great shipping centers; (c) the sale or transfer to the states in which located as part of the health and welfare equipment of those divisions of the country.

7. Some plan of cooperation between the federal government and the various states in the use of hospital facilities should gradually be evolved which would lead eventually to guidance and assistance by the federal authorities in making uniform hospital practice over the whole country.

8. Hospital construction should be combined with other federal construction and engineering work in one department. The continuance of a federal board of hospitalization, similar to that now in existance, should be retained as a consultant body under budget provision.

Personality is not a gift of the gods to a chosen few. It is a power that lies within the reach of everyone, and which is quite as capable of being developed as the mind. It is a combination of qualities, each in themselves teachable and learnable, which, when so thoroughly absorbed by the individual as to become a fixed part of his being, is expressed by him freely and without offense to the ears, eyes, and the good tastes of the worth-while persons with whom he comes in daily contact.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

THE FATS IN THE HUMAN ECONOMY*

BY HERMAN SCHWARZ, M.D., NEW YORK.

BEFORE taking up the question of the fats in the human economy, it might be wise to give a brief outline of some of the chemical facts known about fats.

All substances soluble in ether are roughly termed lipoids and most of us are using the term lipoids to cover all sorts of fatty substances. These lipoids as far as they interest us may be divided into fatty acids, soaps, neutral fats, cholesterol and phospho-lipins.

Fatty acids are soluble in ether and insoluble in water; they may be either saturated, unsaturated or volatile. Saturated they are a still higher series of the acetic acid type, such as palmitic acid, $_{15}CH_3\ (CH_2)_{14}\ COOH$, or unsaturated, an example of a lower series of the acetic acid type, such as oleic acid, $CH_3\ (CH_2)_7$.

Fatty acids plus alkali form soaps (which are soluble in water).

Fatty acids plus alcohol form an ester, such as cholesterol containing no phosphorus or protein.

Fatty acids plus glycerin form neutral fat called triglycerides.

Neutral fat plus phosphorus forms phospho-lipin or lecethin.

The neutral fats are the natural form in which the fats are stored in the body. These are made up of three principal fatty acids; palmitic acid which, as seen from above, mixed with glycerin makes the fat called tri-palmitine.

Stearic acid mixed with glycerin makes the neutral fat called tri-sterin. Oleic acid mixed with glycerin makes the neutral fat called tri-olein.

The differences between these neutral fats and fatty acids are very great and can be determined by various tests, such as the melting point test. This is the point which is reported by a thermometer at the exact amount of heat at which the fat is liquid. Thus:

Oleic acid is liquid..... at 0° C.
Palmitic acid is liquid..... at 62.6° C.
Stearic acid is liquid..... at 69° C.

Therefore any fat containing a mixture of these three different neutral fats or fatty acids is liquid or solid according to the amount of these various fatty acids which it contains. Thus mutton fat is stiffer and harder than pig's fat because it contains more stearic acid and it is only at 69° C. that it is liquified.

Iodine attaches itself to the unsaturated fatty acid and thus the amount of iodine taken up in a mixture of fats gives us an idea of the amount of unsaturated fatty acid present. Reichart Meisel value shows the amount of volatile fatty acid present.

*Paper read before the dietitians at Mount Sinai Hospital, New York, February 19.

Quantity of Fat to Be Ingested

The quantity of any of the food stuffs to be ingested in twenty-four hours is always of interest and value in making up a balanced ration. This was of more value from the standpoint of economy and conservation during the war. There was therefore an inter-allied scientific food commission, appointed, consisting among others of Graham Lusk, R. H. Chittenden, the English physiologist, Starling, Ormsby and Mendel. They studied the maximum and minimum fat requirement of a human being and came to the conclusion that, strictly speaking, there was no physiological minimum of fat in an otherwise abundant diet.

The development of the intestine, however, of which we will speak later, makes it necessary to supply a considerable portion of fat in the food. Dietitians know moreover that the amount of fat used in the diet depends to a certain extent upon culinary and psychological reasons. The taste of the food is not pleasing without it. However the Japanese, as you know, use little or no fat in the diet. Yet it is known that fat when it is reduced to a minimum in the diet, certainly diminishes the energy and available work of the individual.

The commission came to the conclusion that the daily ration of fat in man was 75 gms. per day or 2.5/8 oz. or 700 calories, about one-quarter of the total caloric requirement. An active lumberman uses 388 gms. or 13½ oz. An infant at the breast takes 1½ to 2 oz. of fat per day, about 50 per cent of its caloric intake in order, as you will see later, to spare its protein.

Influence of Fat on Metabolism

In a fasting animal which still has fat in the body, the giving of 0 gms. to 300 gms. of fat has no influence upon the protein metabolism.

0 gms. fat given there was 11.9 gms. Urea excreted
100 gms. fat given there was 12 gms. Urea excreted
300 gms. fat given there was 12 gms. Urea excreted

In other words, the fat ingested was simply burned and spared the body fat and protein. In man without starvation the additional fat increases the metabolism 9 to 14 per cent during the seventh hour; 6 to 8 per cent during the eighth hour after ingestion. After the ingestion of fat the heat energy rises until the sixth hour above the basal metabolism rate. This corresponds to the

amount of fat in the blood as shown by the following table:

Fasting blood fat equals	0.6 %
Given olive oil after 3 hours equals	0.73%
Given olive oil after 6½ hours equals	1.20%
Given olive oil after 8 hours equals	0.87%

so that the increase of fat in the blood corresponds pretty well to the increase in energy derived from the ingestion of fat. It has been shown that less protein is burned in starvation when the body is fat. It has also been shown that nitrogen equilibrium can be obtained by giving 3½ times the protein which is burned during starvation. If you take the basal metabolism during starvation you will get the amount of protein consumed, which is obtained from the animal's own tissue. If you give three times that amount of protein you will find that the animal will excrete and take in the same amount of protein; in other words, he is in protein equilibrium. Now give this starving animal fat and instead of 3½ times the protein necessary to keep him in equilibrium, only 1.6 or two times the amount will be necessary. This shows the way in which fat spares the burning up of protein. This will be even better seen by the table taken from Lusk.

INFLUENCE OF FAT INGESTION ON NITROGEN RETENTION

Food			Metabolism	
No. gms.	Fat	Carbohydrate	No. on Excretion	No. in Body
23.6	99	260	26.36	3.64
23.5	195	221	21.50	1.85
23.0	214	226	18.50	4.13
23.4	350	234	17.00	5.75

Nutritional Value of Fat

In addition to the ordinary energy value and culinary value, we have another important function of the fat as far as this nutritional value is concerned, and that is its vitamine content. As you know, some fat contains a vitamine called fat soluble A. Just what diseases are caused by the absence of this vitamine is not germain to this subject. However, it is important for dietitians to know the amount of this fat soluble "A" in the various fats. As you know, fish and meat fats contain considerable quantity of this vitamine. Cocoanut, cotton seed oil and vegetable oil do not contain this vitamine. Nut oils also do not contain it. Therefore an investigation by W. D. Halliburton and J. C. Drummond[1] of the margarine made of the various fats showed that beef fat and oleomargarine contain this factor and are thus equal in nutritive value to butter. Margarine made from cocoanut oil, cotton seed oil, vegetable oil and nut oil do not contain this factor and thus are not equal in nutritional value to butter.

Many studies have been made from many standpoints of the digestibility of the various oils and fats. L. F. Langworthy and A. D. Holmes[2] investigated the relationship of the hardness of fats (their melting point) and their digestibility. Liquid oils are hydrogenated in order to harden and to increase their melting point. Butter fat, lard, beef fat and mutton fat were investigated. From the table it will be seen that fats of a low melting point have a slightly greater degree of digestibility, but their utilization is as good as any. The digestibility of other portions of the ration is the same with any fat.

Fat Studied	Co-Efficient of Dig.	Melting Point Degree C.	Digestibility of other portions of ration
Butter fat	97	32°	93 —
Lard	97	35°	92 —
Beef fat	93	45°	91 —
Mutton fat	88	50°	93 —

The conclusion is that fats of low melting point have a slightly greater degree of digestibility, but their utilization is good as any.

1. Journal Physiology, 50, 35, 1917.
2. Bulletin 310 and 136, U. S. Dept. of Agriculture.

Fat is the article of food that remains longest in the stomach and provokes the greatest outflow of gastric juice. Just why this is so is not known, but it is an accepted fact that a meal rich in fat stays in the stomach the longest. The question that has been investigated for a long time has been whether any fat is digested in the stomach. The researches of Sedgwick[3] and Heinsheimer[4] have proved that a fat splitting ferment exists in the stomach and that fat is split up to the extent of about 25 per cent, but that does not mean that the gastric nucosa absorbs any of it and passes it into the system. In fact, von Firth doubts if any of it is absorbed by the stomach but it is well mixed and emulsified. With the rest of the stomach content the fat is emptied practically unchanged into the small intestine.

There it is mixed with the bile and pancreatic juice and is prepared for the body. In the pancreatic juice there is a ferment called lipase for its property of being able to split up neutral fats, or tri-glycerids, into fatty acids and glycerin. The alkaline reaction of the upper part of the small intestine further changes some of the fatty acids into soap, and in this form, that is in the form of fatty acids and soaps, they can be taken up by the epith cells of the small intestine. It has not been proved that the neutral fats, as such, can be taken up by the cells. The bile alone has no action whatever upon the fats, but it does act upon the lipase, increasing its activity many fold. In other words, it acts as an activator upon the ferment. Furthermore, the bile increases the solubility of the soaps. The bile salts in the bile seem to be an activating factor. The absence of the pancreatic juice diminishes fat digestion by 50 to 60 per cent, as seen in cases of pancreatic duct fistula. Absence of the bile diminishes the digestion of the fat 80 to 90 per cent, as seen in cases of congenital obliteration of the bile duct in new-born infants. It will be seen, therefore, that absence of the bile is of greater significance than the absence of the pancreatic juice.

Fat Transport in the Body

It will be seen then that the fat now is ready to be taken up by the cells of the small intestine. Leucocytes gather about the epithelial cells. The fatty acids and soaps may be seen in these cells but in the form of neutral fats; that is, these cells have the property of synthetizing these fatty acids and soaps into neutral fats again. They may remain some time and from there go into the lacteals, and from the lacteals into the thoracic duct and this, as you know, enters the blood stream. What happens to the fat in its transport from the lacteals to the thoracic duct is not known, except that before passing out of the epithelial cells it is reduced to invisibility. The leucocytes carry the fat to the lacteals. However, only about 60 per cent of the fat in the intestinal wall is recovered from the thoracid duct. What happens to the other is not known; whether fat directly enters the blood stream without the passage through the thoracid duct has not been proved.

Clark and Clark have shown by experiment that if you inject fat into the tail of a tadpole, lymphatics and leucocytes carry the fat away, but no fat gets into the blood capillaries. This may or may not prove that some of the fat enters the blood stream direct from the intestinal wall. From the thoracid duct, pure fat is injected into the blood stream and can be seen by the darkfield microscope as fine particles which are called hemiconia. The fat, perhaps, enters the corpuscles where lecithen is formed, but it soon enters the plasma of the blood and is

3. Jahrbuch für Kinderkeilk, 64, 1906, 194.
4. Deutmedwoch, 1906--1194.

transported throughout the body, first, into the various fat depots, second, to the liver, and, third, to the tissue cells. The fat as it exists in the blood makes up about 0.7 per cent; of which fatty acids make up 0.4 per cent, lecithen 0.3 per cent and cholesterol 0.2 per cent. In many diseases, this fat in the blood may be increased, for instance, in starvation, anemia, diabetes, chronic alcoholism, phosphorous poisoning, anesthesia and other toxic conditions.

Destination of the Fat

These various fats, the depot fat, the liver fat and the tissue cells fat are different from one another, as can be seen from an analysis of their fatty acid content.

Depot fat equals.....95% fatty acid.
Liver fat equals.....75% fatty acid except during metabolism and then it is depot fat.
Tissue fat equals.....60% fatty acid.

The principal fat depots in the body are: (1) the subcutaneous tissues; (2) the retroperitoneal tissues; and (3) the bone marrow. This depot fat comes partly from the fat in the food and partly from the carbohydrates ingested. That it comes from the food fat can be shown from the well-known experiment of feeding a dog with mutton fat. You will remember that the melting point of mutton fat is high, 50° C. and thus easily recognized. After feeding the dog for some time with mutton fat and then killing him, you will find the dog a dog in sheep's clothing, for his entire subcutaneous fat will have the high melting point and will really be mutton fat, thus proving that the mutton fat as such was deposited in the dog's subcutaneous tissue. That carbohydrate can be transformed into fat was shown by the old experiment with the pig. Two pigs of equal weight and size were taken from the litter, one was killed and an accurate estimation of the fat in its body made. The other was fed upon a pure carbohydrate diet, absolutely no fat in the food, and yet when he was killed after a certain length of time his fat was much in excess of the other pig's fat.

The subcutaneous and retroperitoneal fat serves as a protector against cold, prevents radiation of heat and prevents trauma to many of the internal organs. It becomes used up during starvation and fever. It is carried by the blood to the liver and made available to the body. While in its depot the energy is locked up to be liberated by the liver. Ninety per cent of the depot fat may be used up in starvation. Just how the fat from the depot gets into the blood stream is not known.

The liver is a half way house in the metabolism of fat. During the process of digestion the liver fat is in part derived from the food fat. This can be shown by putting another distinctive fat, such as cocoanut oil which is very volatile and easily recognizable, into the intestine of an animal, then after a few hours killing this animal; some of this cocoanut fat will be found in the liver. However, some of the liver fat is also depot fat, especially during starvation and in some diseases, such as phosphorous poison or other obscure forms of liver degeneration. This is shown by starving an animal, giving him a marked fat and then poisoning him. It will be seen that the depot fat contains the same marked fat as the liver fat.

	Higher fatty acid % dry weight	Iodine value
Normal fat in liver	13.7	116.8
Commencing fatty change	25.	96.0
Markedly fatty liver	70.	69.

The changes which occur to the fat in the liver can be observed by determining the iodine value, that is the degree of saturation of the fatty acids in the liver. It will be seen that the liver has the power of desaturation. The fatty acids are more easily broken up and lecithen and other compounds formed.

From the previous experiment cited we have seen how sugar is converted into fat. This is very difficult to show chemically, but from the following formulas you will be able to see the change.

Glucose $= 6\ C_6H_{12}O_6 + 13\ O_2 = 20CO_2 + C_{12}H_{32}O_2 + 20H_2O =$ fatty acid $+ CO_2$ and H_2O.

The glucose is oxidized and broken down into a number of molecules. Carbon dioxide, fatty acids and water are formed. The oxygen used in this process is stored up in the fatty acids, which is the reason why fatty acid contains more energy and heat units than carbohydrates, and one gram of fat equals 9.3 calories, and 1 gm. of glucose only 4.1 In a normal body this change is very transient and rapid, and cannot be measured or proved. In pathological processes, however, such as starvation or diabetes, this change may stop anywhere. The first one is that butyric acid forms, and then BOxy butyric acid, later aceto-acetic acid, finally acetone.

NEWS ITEMS

Two members of the class of 1922, University of Illinois, are to be found at the Toledo City Hospital. Miss Madge Lincke has been there some months, and Miss Eugenia Martin recently accepted a position there.

Miss Lucile Dunham has resigned her position at Flower Hospital, Toledo, and expects to spend some months at her home.

Miss Mary Rhoads has given up her work as dietitian with the Tuberculosis League of Pittsburgh and will take a long vacation at her home in Boyertown, Pa.

A new assistant dietitian at the Post Graduate Hospital, New York, is Miss Lowell who recently gave up her work with the department of health.

The new head of the department of dietetics at Lucas County Hospital, Toledo, is Miss Gertrude Bretz.

Dr. H. O. Pollock, biological chemist at Mercy Hospital, gave a lecture on "Basal Metabolism" at the March meeting of the Allegheny County Dietitians' Association held at Mercy Hospital, Pittsburgh. Demonstrations and an explanation of the operation of a gasometer accompanied the lecture. The usual round table discussion and social hour followed.

"Home Talent Night" of the Chicago Dietetic Association took place at the February meeting following the announcement that Miss Agnes Gleason, manager of the Parkway Tea Room, would not be able to fill her engagement to speak. Miss Smith, dietitian at Presbyterian Hospital, gave a detailed outline of the lessons in diabetic food preparation given patients at that institution. The course includes the cooking of vegetables, washing bran, preparation of diabetic breads and desserts. Miss Anna Boller and Miss Chambers gave a report of the medical meeting at which the discoverers of insulin spoke. Miss Straka and Miss Smith of Presbyterian Hospital and Miss Taft of Wesley Memorial reported on some cases which had received the treatment at their institutions.

The second annual meeting of the Ohio Dietetic Association at their institution will be held at Memorial Hall, Columbus, on May 22-24, it is announced. The March meeting of the association was held at the Maternity and Children's Hospital, Toledo, on March 7. Miss Lulu Sidwell of that institution spoke on the diets she uses for her patients, after which the dietitians were taken on a trip over the hospital and luncheon was served. Miss Helen Mallory of Mount Sinai Hospital, Cleveland, at the afternoon session discussed the scheme she uses in arranging menus. A short business session followed and a number of dietitians were elected to membership.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

WHAT WOULD THE HOSPITAL DO WITHOUT PAPER?

By WILL ROSS, Milwaukee, Wis.

WHEN, in the midst of war's alarms, over the cables came the news that the Germans were making clothing—both the upper and the nether wear—out of paper, people stopped their labors to exclaim, "What next will they make out of paper!"

As a contribution to the welfare of the race, the invention of paper clothing probably found its greatest value in focusing in a spectacular way on people's minds the many ways in which paper can be put to good use. Those of you who had an opportunity to examine some of those German "hand-me-downs" will probably remember that they looked like a cross between one of the old fashioned hair stuffed sofas and the suit the country store used to sell for $10, back in those dimly remembered, peaceful days before the war. No one would want to wear them—few people probably did. But they proved that you can do pretty nearly everything with paper from making artificial flowers to decorated floor coverings.

Hospital Use of Paper in Infancy

To the hospital, the use of paper products should appeal with particular force. Paper, first of all, is clean, almost sterile, for in its manufacture it goes through processes involving the use of heat, and in most cases it is untouched by hands until it reaches the consumer. Then, and equally important, it is cheap. It shortens methods and reduces labor in the institution, and does these things at low cost.

Already paper touches the field of hospital service in dozens and dozens of places, yet the use of paper in the hospital is in its infancy.

Some of the ways in which paper enters into hospital use are in articles which we never think of as being made of paper. Take the fibre furniture with which the sun porches are equipped, for example. In reality this fibre is simply paper, rolled and treated to resemble reed and having infinitely greater wearing qualities than the genuine reed. The stenciled rug on the floor may be, and quite likely is, made of paper. It isn't called that—they call it a fibre rug—but in fact it is simply a fibre paper rolled and shellacked to make it strong and waterproof. When you purchased this furniture and rugs for your sun-porches, you paid about half as much as you would have paid for genuine reed furniture or textile rugs. Yet your porches look inviting, and your equipment will last for many years. Paper, mixed with brains, has saved you money and given you a superior article.

The reception of paper in the hospital field has not been as prompt or cordial as might be expected. It has met more cordial acceptance in the industries and community life in general than in the hospital. Perhaps this is because hospitals are slow to react to change. Yet the

Paper towels are regarded as essential in many examining and treatment rooms.

Nurses find paper towels convenient and satisfactory.

Paper cups are a convenient means of administering medicine.

hospital stands as the outstanding teacher of asepsis, hygiene and cleanliness in its community—by example at least, if not precept. As such it should welcome the cooperation of paper, for no one single article has had so prominent a place in an awakened consciousness on matters of public cleanliness and hygiene as has paper.

Having studied the use of paper in its application to institutional life for a number of years, the writer owns that he is a "paper propagandist." He knows too what a nuisance a propagandist can become, and how lopsided his opinions may become under the weight of a one-sided view. He has tried, therefore, to keep a mental balance on the subject, and consider any product that involves a change of methods first from the standpoint of the patient.

Paper sippers or "straws" used with a paper cup have replaced the old-fashioned feeding cups and tubes.

Every consideration of policy in a hospital should go straight back to the patient. Does it affect the patient's interests? Will it benefit the patient or the contrary? Those are questions that must be answered first.

Use of Paper in Food Service

When the time comes that the writer must go to the hospital to have his appendix taken away, he hopes that when he has reached the point where he can take an interest in his meal, that he won't have to eat from a paper dish with a paper spoon and fork. That would be carrying "paper efficiency" too far and to a point where it would offend the patient's sense of the niceties. If, however, the relish, a side dish or two, or perhaps the butter, were served on a trim looking little paper dish, the general reaction to it would be favorable.

For desserts several types of paper dishes are now available that are most practical and attractive. What, for instance, can equal in utility and appeal the silver dishes with paper liners, designed for serving ice cream or sundaes and equally convenient for puddings, junket, custards and gelatines? Finally the use of paper finger bowls, either with or without the silver holder, is gaining steadily in hospital service; rightly so, for it is an inexpensive and attractive little service that appeals to the patient.

The fact is that hospitals have been shortsighted in their attitude towards this question of food service. To the modern hotel, the preparation and serving of food is of paramount importance, for the hotel knows that it is judged largely by its food service. Hospital executives perhaps fail to realize how largely it is true that the patient is influenced favorably or otherwise by the institution's food service, and particularly the manner in which it is served. Hospital patients haven't the same lusty appetite that the hotel guest brings with him, *but they have an even more sensitive eye*, and you need every assistance you can muster in the way of appetizing and eye-appealing tray service to make your trays look good to your patients. If hospitals paid more attention to fine food service than they generally do, we would hear less complaint about high hospital prices. You hear relatively little complaint about the cost of hotel service, yet hotel service the country over is as costly or more so than average hospital service, and the hospital gives an infinitely greater measure of service per dollar of cost. The hotel has been more skillful in selling its public on the value of its services.

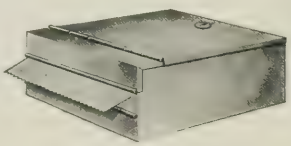
In food service, the most obvious use of paper comes as a substitute for the cloth napkin and tray cover. Here opinion has divided itself into two camps. In one camp are those who argue

Paper fabrications make patients' trays more attractive. The paper items shown in the illustration include paper tumblers, tray cover, napkin, butter pat, chop holder, vegetable side dish, dessert service and tray marker.

that their patients would never accept a paper napkin or tray cover with satisfaction; in the other are those who say that any patient would prefer a crisp clean paper napkin in preference to a cloth napkin yellowed by laundering and torn and dog-eared in its journey through the mangle. Desertions from Camp No. 1 to Camp No. 2 are reported daily, with morale in Camp 1 at low ebb. Camp No. 1 had considerable argument in the earlier days of the paper napkin, but with the steady improvement in qualities and devising of paper napery which imitates the cloth napkin in design, the general use of paper napkins and covers in hospitals seems now but a question of time.

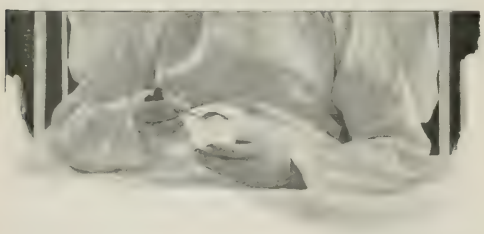
Supplants Common Drinking Cup

As yet the possibilities of the paper cup are little understood. Glassware breakage is a tremendous item of cost in the hospital, and one hard to avoid. This could be eliminated with the use of "paper" glassware. There are certain types now on the market that are as attractive as a glass tumbler. As another suggestion, small paper cups used for serving boiled eggs save a lot of time at the dishwasher. Egg residuent sticks, like a bill collector, and has to be loosened before the cup is washed. Paper cups, used and thrown away, would do away with this entirely. Paper glasses in the contagious wards are a more obvious necessity. And paper cups at the public drinking tanks! Why is it that one of the few remaining places in which you can find a common drinking cup used at an ice water cooler for general use is—in many a general hospitals. The hospital that is teaching its community hygiene—and still maintains a general drinking tumbler or glass —well, you say it. And while you're saying it, look into the matter of the common roller towel. Many a hospital still sticks to it (figuratively speaking as well as literally) with loving care. Yet such good paper towels can be procured!



Toilet paper dispenser for bedside table.

About fifteen years ago a manufacturer tried desperately to introduce a paper substitute for absorbent cotton. Did he succeed? He didn't. Come to think of it, we did love our ruts, didn't we, in those days before war came along to blast us out of our ease and contentment. When the war came, there wasn't enough absorbent cotton to go around. So another manufacturer produced a paper substitute. Hospitals took it because they had to, but they said, "We'll go back to absorbent cotton after this is over, believe me." And they did, almost to a man. But



Patients appreciate the dainty freshness of paper service for between-meal feeding.

after a bit they began to realize that the paper substitute was, as is claimed, more absorbent, and that it did most of the things that cotton would do and did them more cheaply. So back they came to the paper substitute, and today hundreds of hospitals are using the paper cotton to a large extent. Paper bandages were another war time measure, but lacking sufficient strength, they didn't last;

The surgeon appreciates the sanitary value of paper towels.

although here and there, in emergency hospitals particularly, they still fill the bill better than the gauze bandage could do, or at least at a smaller cost.

It would take too much space to list at any length the various items made of paper which have won or are winning their way into hospital practice, but a brief listing is permissable.

Paper parchment sheets, particularly for cribs, are an admirable rubber sheeting substitute. being cheap, noiseless, perfectly waterproof, and not as hard on the body. A similarly prepared paper is a substitute for oiled silk and other more expensive dressings, and also used for aprons and similar protections.

Nothing like the use is made of the paper bag that is possible. Large sizes make admirable waste "catch-alls," being more satisfactory than cans because when filled they can be burned, thus eliminating unpleasant cleaning. In the heavy weights, they will carry wet dressings without tearing, as well as garbage and dry refuse. In the smaller sizes, paper bags are used for requisitioning-out food stuffs and for bedside waste disposal.

The paper napkin, in addition to its use on the tray, can be cut up into small sizes which hospitals "in the know" call ether wipes or tonsil napkins. These small cuts can save a hospital a great deal of money as substitutes for gauze or clean rags, and are just as satisfactory if a soft crepe napkin stock is used.

Another recent paper device of value is a cup, made without the use of paraffin to give it strength, and designed for serving hot liquids, medicines, etc. By eliminating the use of paraffin, the cup is tasteless and when used with hot liquids. These cups are low in cost. Then forget not the "soda straw" or sipper. In the early days of the soda fountain it was a straw, but as has happened with so many other items, paper proved itself able to do the job better. The sipper is now an established item of hospital service, and had it done nothing more than drive the old goose neck feeding cup to the junk pile, it would be entitled to its niche in the hall of fame.

No type of institution appreciates the virtues of paper as does the tuberculosis sanatorium, and this is so be-

cause in a tuberculosis institution, handling an infectious disease, paper which can be burned after use in an obvious necessity. But the tuberculosis sanatorium has gone beyond the obvious uses, and you will find it using paper blankets mixed in between the wool blankets, and paper spring covers under the mattresses to protect outdoor sleepers against cold winds. Many of them provide their patients with snug-fitting paper vests because these garments shield the wearer from the cold, and are important where patients spend so much of their time out of doors in all seasons and weathers.

In the general hospital, the absolute need for paper items is perhaps less obvious. So much the more reason for endeavoring to hunt out ways in which paper can save time or money. It is an interesting study, and likely to be a profitable one.

Go through your own institution some day with an open mind and a mindful eye, note the many places and ways in which you are now using paper in some form or other, then ask yourself how greatly you would be inconvenienced if suddenly every scrap of paper and every article in your hospital made partly or entirely of paper were taken away. A fair answer would be a good incentive for studying new ways in which your good friend Paper can be put to work for you.

LENGTHENING THE DAYLIGHT DAY BY MEANS OF PAINT AND INTERIOR ILLUMINATION

By Frederick Arnold Farrar, Chicago.

HOSPITAL administrators are ever looking for new ways to economy, better comfort and sanitation, but very few are fully aware of the surprising influence that colors, densities and surface finishes of paint may have upon both the quality and quantity of artificial, or even natural, indoor illumination. In fact, it has only been during this last year or two that any serious, systematic study has been undertaken along this line, but it is a subject that hospital and big building managers, architects and engineers, are taking more and more interest in, especially, as they gain a greater knowledge of eye comfort, economy in night lighting and costs of maintenance of lighting systems and interior surfaces. It works for success all around.

Recently, a progressive painter in a modern hospital paint shop made up two gray shades, using different tinting colors in producing each. After this, the two grays were coated on wood and metal, and the samples when dried tested for their lighting properties. This being done, an interesting point was discovered; though the color match was perfect, one of the colors absorbed more light than the other. The obvious conclusion then is that most all ingredients in paint have a strong influence upon their efficiency as light reflectors, and that colors or tints are not the only thing to take into consideration when determining efficiency.

Paint and Lighting Closely Related

Other and very interesting conclusions have been reached from further study, but to understand the interaction of light and interior surface coatings better, one should keep well in mind the following helpful points.

The light from an electric lamp, for instance, penetrates further into some surface films than others. If light reflects from a dense surface, or as it would from a highly glazed surface, it would naturally remain unchanged in color. An action of this character may be seen by reflecting a ray of white light from a sheet of red glass, and observing that the reflected ray still remains uncolored, i. e. white, but if the light penetrates somewhat into the surface, it will be redirected back with a change in color, just as the ray of white light which passes through the sheet of red glass will emerge red. The ordinary mixture of ochre and oil applied to a tin roof illustrate this coloring action of the painted surface upon light, because here the diffusely reflected light of the sun will be decidedly pink.

The possibilities of the commercial application of this fact are almost unlimited. Should a merchant desire to secure artificial illumination in a store which would approach or approximate daylight in color-quality, he might use the daylight blue Mazda lamps in the lighting units, but might absolutely counteract the color-correcting action of the blue glass of the lamps, or the inclosing globes, by using a red or yellow shade of interior paint. Most people, particularly in a hospital, prefer a warm, colored atmosphere, and the original white light of either day or night illuminates can be made slightly golden or less cold and harsh by carefully selected ceiling and wall colors of rich cream, old ivory or tan. They will warm up a room in tone, relieving the eye and nerve strain.

Must Know Laws of Light Reflection

You would never find a good paint salesman, for instance, who would permit a jeweler to use gray or green colors in a room where pearls are sold; neither would he recommend yellow or red walls to surround displays of cut glass, silverware or diamonds. Rooms in the modern building, having northern or north sky exposure, as a rule, should be finished in cream rather than in gray or greenish colors. When rooms face south and have a large amount of direct sunlight, use the light grayish-green colors for the greatest eye comfort.

Great mistakes are frequently made in painting because of a misunderstanding of the laws of light reflection. One commonly expressed mistake is that "the angle of reflection equals the angle of incidence." We all should note that this law holds true so far as the surfaces are concerned, like mirrors, polished metal, or like a highly polished varnished surface. The fact is that when a light is reflected from a matt, stippled or depolished surface, it will be spread out greatly, and the most of it will be directed back normal or perpendicular to the painted surface, regardless of the direction from which it origin-

ally came. For this reason you will see it is of no benefit to have glossy finishes of painted surfaces; in fact, the amount of light reflected therefrom is usually no greater than that reflected from a matt surface, and shiny surfaces create bright images of light sources and thus augment glare.

Paint colors have a tremendous effect upon the quality of usable illumination, and in smaller rooms this effect is so great that one may well emphasize it repeatedly. For instance, suppose that we have two small rooms, one finished in a dirty yellow color, that has a reflecting value or coefficient of 70 per cent, the other finished in medium cream color with a coefficient of 80 per cent. The direct light on the table in the first room would be increased (by virtue of multiple interior reflections) by 2.3, while the increase in the second room would be 5.0. If a 150 watt Mazda lamp furnished sufficient illumination for the first room, then a 100 watt lamp would furnish about the same illumination for the second room.

It would cost no more to paint with a good cream than with a darker yellow. The labor cost is the same, yet in the darker interior the cost for lighting power to produce the same illumination would be 50 per cent greater, a big saving, whether taken into consideration for a week or a year.

Hospital managers will readily see that it would pay to refinish dingy interiors, because thereby the useful illumination can be thus so greatly increased and the costs of lighting so greatly reduced. The saving in electric power usually can more than offset the necessary cost of painting.

Always remember that painting for light is a very important subject, and its careful study and the following of its principals makes a big difference in net profits. The proper cleaning of painted surfaces is also likewise important; cleaning should in all cases precede painting.

Choose well your colors, study the natural lighting of your rooms, and use such shades as will help to lengthen the daylight day, ease the strain of patients, and you will find that a great saving can be made and the occupants of the rooms will be healthier and happier.

FOLDING GOODS IN THE HOSPITAL LAUNDRY*

By WALTER T. WILLIAMS, Cincinnati, Ohio.

AS FAR as the writer has been able to learn, there is not in hospital laundries, taking them collectively, any semblance of what one might call "common practice" in the folding of miscellaneous articles. In research work for this series of articles cases were even found where each folder in the same hospital was doing the work differently. Furthermore, cases were discovered where a worker was folding a given article one way one time and another way the next. In one case an experienced folder was requested to fold an article, and after it was opened up she was unable to fold it up the same way again. An investigation showed that she had no idea of standard methods, and she just folded up things in any way that struck her fancy at the moment.

Fig. I
First fold of nurse's uniform.

Fig. II
Second fold of nurse's uniform.

The general practice, it appears, is to fold the pieces in any convenient way, with little regard to the shape and size of the article after it is folded, and it often happens that no effort is made either to have the mark come where it can be seen or have it where it readily can be found. This, of course is poor economy.

In most hospitals a great amount of care is taken in the laundering of the nurses' uniform. In some hospitals the uniforms, sometimes referred to as dresses, are not folded at all, but they are delivered on hangers, either being hung up in the linen room, where the nurses can get them, or placed in their quarters. One plan for folding these garments is shown by three of the accompanying illustrations.

By this method the garment is spread on the table, button side down, with the opening closed and the sleeves spread out flat. Then (1) fold lengthwise, so as to divide the garment into thirds, drawing over the sleeve, as shown in Fig. 1; (2) same as (1), as shown in Fig. II; (3) fold across the narrow way, in center, as shown in Fig. III. Another fold may be necessary, but it is best to avoid it if possible. It is well to refrain from pressing down the

Fig. III
Third fold of nurse's uniform.

*The third of a series of articles on folding goods in the hospital laundry written for THE MODERN HOSPITAL by Mr. Williams.

Passing Fads in the Manufacture of Dentifrices

Not a Medicated Dentifrice. Years ago Colgate & Company refused to meet artificial demands for a highly medicated dentifrice. They followed scientific dentists in the contention that strong drugs are harmful to the mucous membrane of the mouth. Such drugs should not be used in a dentifrice except in the treatment of pathological conditions, and then only under the advice of a dental practitioner.

Not an Acid Dentifrice. Once more Colgate & Company's stand is with the scientific members of the medical and dental professions who refuse to use an acid tooth paste. Those doctors recommend to their patients a dentifrice with high cleansing qualities, pleasant to taste, containing a thorough non-gritty cleanser.

Colgate's Dental Powder holds a high position among those of the dental profession who prefer a dentifrice in powder form. As with Ribbon Dental Cream, it is based on the same fine precipitated chalk and pure soap.

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folds, leaving them as loose as can be done, in order to avoid undue creasing of the garment.

A method of folding skirts is as follows: Spread the garment on the table, placket side down; (1) fold from band to hem, dividing the skirt into thirds; (2) same as (1) but reversed; (3) across narrow way, in center.

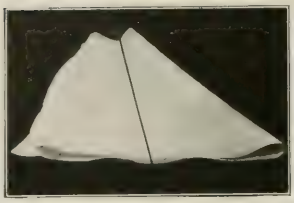

Fig. IV.
First and second folds of full-length apron.

Fig. V.
Full-length apron, after the third fold. The fourth fold is indicated by the dark line.

A point that was brought out in several hospitals is this: Nearly every woman strenously objects to having a crease down the front of her skirt. This, it seems, is considered "bad form." Therefore it is well to bear this in mind, both in folding separate skirts and in folding garments that have the skirts attached, especially such things as are starched.

The manner in which a full-sized apron is folded in one hospital is shown by Figs. IV and V. The very simple process is, (1) fold in center, from band to hem; (2) again from band to hem, as shown in Fig. IV; (3) same as (2) as indicated by dark line in Fig. IV, and as shown in Fig. V; (4) across narrow way, in center, as indicated by dark line in Fig. V.

It is important to note that this plan of folding brings a fold in the center of the article, and as the apron closely resembles a skirt, there may be some objection to it. It seems, however, that this plan is not objectionable in this instance, because no permanent crease is made. The apron is heavily starched, and as it is rolled up loosely, rather than folded, no crease is made down the front.

Patients' bedgowns may be folded in about the same manner as any other sleeved garment, but in one hospital a different method is used. In it the bedgowns are done up "rough dry"; that is, they are only washed and dried, the ironing being omitted. Figs. VI, VII, VIII and IX give a good idea of this method of folding.

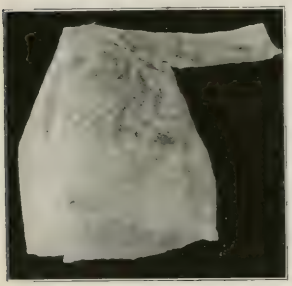

Fig. VI
Patient's bedgown, after the third fold.

Fig. VII.
Patients' bedgown, after the fourth operation. The dark line indicates the fifth fold.

Fig. VIII.
Patients' bedgown, after the fifth fold.

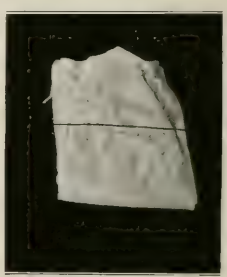

Fig. IX.
Patients' bedgown, after the sixth fold. The dark line indicates the seventh fold.

The bedgown is open in the back. Fold one is in the center, from neck to bottom hem, bringing right side in, with sleeves extended; (2) bring one edge to the center fold, leaving the sleeves extended; (3) turn the gown over and fold same as (2) after which it will be as shown by Fig. VI; (4) fold the sleeves under, as shown in Fig. VII; (5) fold lengthwise, in center, as indicated by the dark line in Fig. VII, bringing the

Fig. X
First fold of sleeveless nightgown.

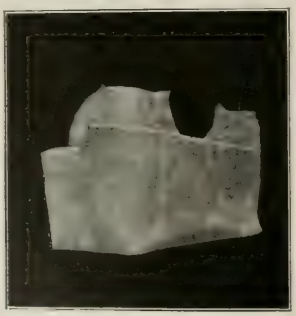

Fig. XI
Sleeveless nightgown, after the second fold.

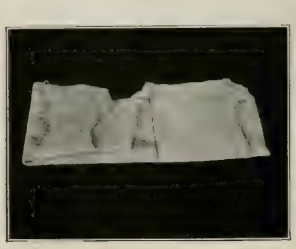

Fig. XII.
Sleeveless nightgown, after the third fold. The dark line indicates the fourth fold.

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sleeves over, as shown in Fig. VIII; (6) across narrow way, in center, as shown by Fig. IX; (7) parellel to 6, in center, as indicated by the dark line on Fig. IX.

Ordinary nightgowns may be folded the same as a shirt, the folding of which was described in a previous article of this series, but an additional cross fold will be needed to bring it down to size. Likewise, waists and blouses may be folded the same as shirts, but one cross fold will be omitted where the garment does not extend below the waist line. Shirt folds may also be used for shirt kimonos and many other sleeved garments.

An ingenious and simple method of folding sleeveless night robes and other sleeveless garments is illustrated by Figs. X, XI and XII, the steps being as follows: Spread the article on the table with the front upward; (1) fold across, bringing the bottom hem near the bottom of the neck opening, as shown in Fig. X; (2) parallel to (1) half way between hem and previous fold, as shown in Fig. XI; (3) across narrow way, dividing the garment into thirds, as shown in Fig. XII; (4) same as (3) as indicated by dark line in Fig. XII.

Folding and Marking Systems Should Harmonize

In this and the two articles that have preceded it there has been outlined as clearly as possible a simple method of folding most of the articles that come to the laundry of an average hospital. A specific method of folding some articles has not been given, because they are almost the same in form as articles the folding of which has been described, and may be folded in practically the same way. For example, a bath robe may be folded the same as a night robe, so there is no necessity of repeating the description of process.

The main point to the series of articles on folding is this: In every hospital laundry there should be a standard method of folding all articles; that is, a given article always should be folded in the same way. And it should be remembered that the prescribing of a standard method is not enough; it must be adhered to. There also should be a standard system of placing the marks, for the folding and the marking are interdependent, and the system of doing one must harmonize with the system of doing the other.

A PERMANENT INK FOR MAKING RECORDS

Numerous hospital administrators have made inquiry as to a writing ink which will insure permanence of records. Many of the commercial writing fluids fail to give satisfaction in this respect, with the result that frequently important records, case histories and clinical data fade out and are practically illegible after a period of time.

The U. S. government has prepared a formula for a standard writing fluid which is employed in its various departments and which is claimed to have greater merit and more definite permanence than can be secured from commercial writing fluids.

The suggested formula for making this writing fluid, as prepared by the Bureau of Standards, is given below:

Take of pure dry tannic acid, 23.4 grams; of gallic acid, in crystals, 7.7 grams; of ferrous sulphate, 30 grams; of dilute hydrochloric acid (U.S.P.), 25 grams; of carbolic acid, 1 gram; of dye, Bavarian blue D.S.F. (Schultz and Julius, No. 478), 2.2 grams; make to a volume of 1,000 cubic centimeters at 60° F with water.

In making the ink, dissolve the tannic and gallic acids together in about 150 cubic centimeters of warm water, dissolve the ferrous sulphate in about 150 cubic centimeters of cold water, and dissolve the Bavarian blue in about 700 cubic centimeters of warm water. Add the hydrochloric acid to the ferrous sulphate solution, then immediately mix it with the cooled solution of the tannic and gallic acids, dilute to a volume of 1,000 cubic centimeters and mix thoroughly, add the carbolic acid, and allow the mixture to stand for several days.

The ferrous sulphate (or iron sulphate) and the tannic and gallic acids unite to form the real active principle of the ink. The hydrochloric acid is added to prevent the formation of sediment, the Bavarian blue is a water soluble blue dye which is added to give the ink a pleasing first color so as to render it legible until the intense color of the ink itself has had time to develop, and the carbolic acid is added as an antiseptic to prevent the formation of mold.

The government standard writing fluid may seem to the person who uses it for the first time to be rather thick and slow flowing. These objections usually are brought forward by those who have been in the habit of using commercial writing fluids. If the government standard ink were to be diluted with an equal volume of pure water, it would approach very closely the composition of most of the writing fluids and fountain-pen inks on the market. For important records, however, it should never be diluted. After it has been used for a while one becomes accustomed to it and realizes that the advantages which it possesses far outweigh the seeming disadvantages which were first noticed."

NEW BANDAGE CUTTER

The widespread use of bandage rolls among hospitals has brought about the introduction of a new bandage cutter designed primarily for use in this connection. Hitherto bandages have been cut by means of an ordinary knife or with a simple device consisting of a wood trough or miter box and an adaptation of the ordinary serrated-edged bread knife. The new cutter, however, is positive

in its action, holding the bandage roll securely and cutting off any width bandage with a single stroke of the cutting lever. One advantage claimed for this cutter is that it leaves no frayed edges on the bandage, each one being cut cleanly and easily.

One important gain in the use of bandage rolls lies in the fact that bandages by means of this new cutter can be secured in any desired width. It is possible to gauge the cut exactly to the fraction of an inch.

Little coughs often lead to large coffins.

Adv. page 48

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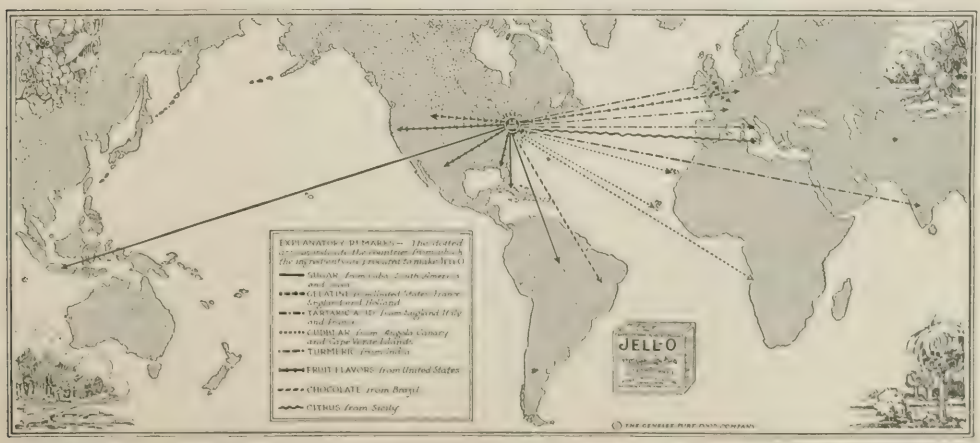

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary Committee on Dispensary Development, United Hospital Fund of New York, and Chief, Service Bureau on Dispensaries and Community Relations of Hospitals, American Hospital Association, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association 370 Seventh Avenue, New York

REFRACTION AND PROVISION OF GLASSES IN EYE CLINICS OF NEW YORK

By GERTRUDE E. STURGES, M.D., Assistant Secretary, Associated Out-Patient Clinics of the City of New York

THE Associated Out-Patient Clinics, a membership organization of the leading dispensaries of New York City formed in 1912 for the purpose of studying dispensary problems and suggesting solutions, was confronted last year with many difficult and interesting problems concerning eye clinics. Because of the complexity and variety of the problems presented, a section on ophthalmology composed of physicians representing the thirty-nine eye clinics of the Associated Out-Patient Clinics was organized to study these special problems. An executive committee of distinguished ophthalmologists connected with leading clinics of New York was appointed, and the work began.

Studies of the methods of organization and administration in twelve representative eye clinics revealed a number of unsolved problems. In addition to such outstanding fundamental difficulties as the admission of too large a number of patients in proportion to the space, equipment, and particularly the medical staff available, as well as the failure to follow-up patients with serious eye conditions, there stood out the two matters with which this article deals, namely, refraction work in the eye clinic, and methods of providing eye glasses for patients. The studies of the committee of ophthalmologists led finally to the formulation and adoption of a number of recommendations for improved service in eye clinics.[1]

In all eye clinics, the prime difficulty in refraction work from the standpoint of the medical staff is its routine character. After a comparatively short period of apprenticeship in the clinic, physicians find that refraction work does not provide the interesting professional experience which they value, and which they secure in the general work of the eye clinic. The task of the refractionist appears to most men as dull, routine work. It means performing the same task again and again, dealing with great numbers of patients who are frequently stupid, slow and inaccurate in their answers. Owing to medical inspection in the schools, many children who are thought to need glasses are referred to eye clinics so that a large proportion of the patients who apply for refraction are children. Aside from the uninteresting character of the refraction clientele, there are other irritating matters. As a rule, there are not enough trial cases, which means that more than one doctor must use the same case. Trial cases are frequently incomplete, owing to the original inadequacy of equipment, and also to the fact that with several doctors using the same case, lenses are often put back in the wrong place. All of which makes for general inefficiency of the medical staff.

Although refraction is such tedious work, it requires the services of a skilled and experienced physician, one who can be depended upon to give conscientious attention to detail. This is absolutely essential if the work is to produce actually useful results. Refraction also requires a great deal of time, for if it is done in haste, it may result in inaccurate prescriptions and wrong glasses which may be worse than no glasses at all. Naturally enough, a trained physician will not of his own accord choose to do routine work for which he receives no recompense. The problem of refraction has therefore been found by the section (as stated above) to be of outstanding importance.

Because of the routine involved, a physician who may be rather interested in refraction while he is learning it leaves from sheer boredom just when he is sufficiently trained to be valuable to the clinic. The committee has found, therefore, in its study of the twelve clinics, that refraction is being turned over in many of them to the least experienced men. In only three of the institutions visited is all the refraction done by the physician on the visiting staff; in three others, the members of the staff do the majority of such work; in the rest of the clinics studied, 50 to 100 per cent of the refraction is done by students, interns, or optometrists, in some cases supervised by the visiting staff, but in many cases working entirely independently. In one clinic where refraction actually was being done by the physicians, it was being done under decided protest.

The committee also found that in many clinics, refraction was being done much too rapidly to insure accuracy. The estimated number of patients refracted per physician per hour was in some clinics, as high as twelve, or five minutes per refraction. It is obvious that efficient refraction cannot be done at the rate of twelve patients per hour. Since refraction is not emergent, it would be better to take time and do it right.

Since it has been found that refraction is a sort of

[1] Standards for Out-Patient Service in Ophthalmology. American Journal of Ophthalmology, April, 1923.

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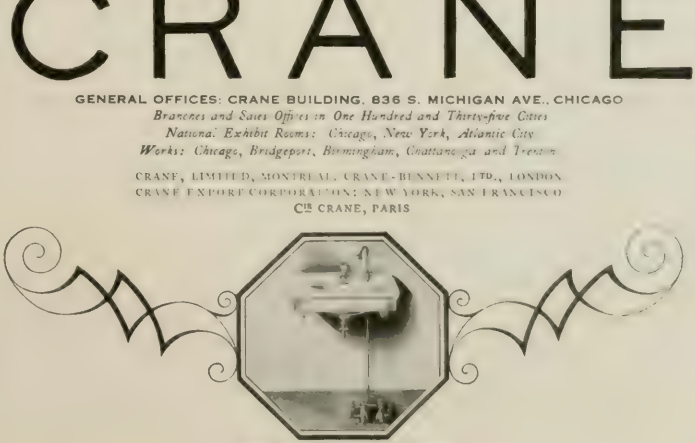

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drudgery, and that it is therefore often turned over to inexperienced men, and that it is in many cases performed too hastily, the committee feels that satisfactory refraction can be secured only by paying skilled and efficient physicians to do the work. The section therefore included in its recommendations the following:

"In large refraction clinics, at least the physician in charge should be on a salary basis."

Because great numbers of patients come to eye clinics for refraction, many large institutions have arranged that this work be done not in the general eye clinic, but in a separate refraction clinic, at a different hour. Otherwise, it clogs the general clinic. This is true not only of large but of moderate sized clinics as well. In those institutions where the patient first applies at the general clinic, and is then referred, when necessary, to the refraction clinic, overcrowding is alleviated. In many of the larger institutions appointments are made for refraction, which ensures that no more patients will attend one clinic session than can be adequately handled by the physicians in charge. The section therefore recommended that:

"In large clinics, refraction should be done in a special clinic under the supervision of an experienced ophthalmologist and with an adequate number of assistants, including the house staff. All patients should be admitted first to the general eye clinic, and, after suitable examination, and when indicated, should be referred to the special refraction clinic."

Would Charge Refraction Fee

Although it is the practice in most clinics to make a charge for various x-ray and laboratory examinations, for special treatments, and dressings, it has not been customary to charge a fee for refraction, a procedure which we have already stated is routine work, yet requires the services of a skilled physician. In order to better the service, the section has felt that refractionists should be paid a salary, and that a fair way to meet this added expense would be to charge a regular refraction fee to the patient. The committee of ophthalmologists has felt that from the standpoint of both patient and institution it would be preferable to charge a refraction fee and provide really adequate service, rather than to continue with the present arrangements which in many institutions are so far from satisfactory. It is, of course, understood that fees would be remitted in all or in part, according to the policy of the institution, for patients needing the service but unable to pay for it. The section therefore recommended that:

"A refracton fee should be charged. To simplify bookkeeping and admission charges, this should be a flat fee of $1 in addition to the regular admission fee, no matter how many visits are necessary in order to complete refraction."

The committee has also learned from its study that many clinics do not give adequate instructions regarding the use and effect of cycloplegics. The amount of cycloplegic to use is not carefully impressed upon the patient, so that he sometimes uses too much. If the patient is a child, as is often the case, the mother who has not had the effect of cycloplegic made clear to her may think her child is going blind. In some clinics visited, the use and effect of cycloplegic is explained by physicians or nurses. Other clinics supplement verbal instructions by detailed printed instructions. The section feels that this latter method is an additional safeguard, and that this matter is of the utmost importance, and should be given attention. The section therefore recommended that:

"Detailed and careful instructions as to the use and effect of cycloplegic should be given. Oral should be supplemented by written instructions."

Most ophthalmologists in private practice recognize post-cycloplegic tests as part of the routine, except in cases of presbyopia, but in clinics the time element usually precludes this practice. The committee found that only three institutions make post-cycloplegic tests as a part of the routine. In one institution only ten per cent of the cases are checked by this method; and in one, none at all. The section felt that this was a precautionary measure which should not be overlooked, and therefore recommended that:

"All patients refracted under a cycloplegic should, if possible, have a post-cycloplegic test before glasses are prescribed."

Profit-Splitting in Glasses

The other equally serious problem with which the committee of ophthalmologists found themselves confronted was that of provision of glasses. Clinic arrangements for providing patients with glasses have always been more or less unsatisfactory. A few institutions have their own optical plant for making glasses, but most large institutions arrange to have them furnished by a local optical firm which sends a representative to each clinic session. The work of providing glasses is thus put in the hands of the optician, who in return allows the clinic in some cases 25, in some cases 50 per cent of the gross receipts. Although considerable surplus may go to the institution, this may be small compared with the profit made by the optician. Patients frequently return to him for repairs, new lenses, etc., which in a year or so may amount to as much as the original price of the glasses. Meanwhile the clinic refractionist performs his routine duties with no recompense whatsoever.

The practice found in some clinics for the individual ophthalmologist to refer patients to an outside optician and divide the profits with him is obviously undesirable. Any financial arrangements should be made by the institution direct and not by individual members of the staff.

One difficulty with referring patients to an outside optician for glasses is that even when they are requested to return to the clinic to have their glasses checked, they often do not do so. It is practically impossible, if the work is done outside the clinic, to make sure that prescriptions have been accurately filled, and to check satisfactorily the quality of workmanship and materials used. It is also difficult to ascertain whether patients ever actually secure their glasses. The institution may not be familiar with the optician's price, and therefore unable to tell the patient what his glasses will cost. Here is opportunity for overcharging, since it is difficult to check the optician on his prices. Finally, should the optician fail to fill the prescription accurately, the time of the ophthalmologist, the clinic and the patient is completely wasted.

Clinic Should Employ Optician

Many large institutions do away with some of these difficulties by having the optician bring the glasses to the clinic, where the patient can secure them. This, the committee found, usually works much more satisfactorily, but again the optician makes the chief profit from the business. If the patient secures his glasses directly from the clinic in the first place, the tendency would be for him to return to the clinic for repairs or new lenses later. His eyes would then be kept under proper supervision as long as it was important, and both patient and institution would benefit. The section therefore recommended that:

"Each institution should either (1) have its own plant for manufacturing glasses, or (2) employ an optician on a full or part time basis to fit and make glasses, contract

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(The Superintendent and the Surgical Nurse were talking. Series XI.)

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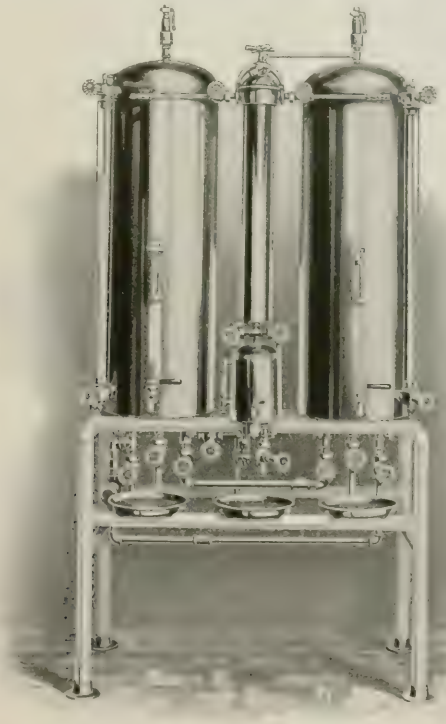

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with a wholesale firm to furnish materials at wholesale prices, and sell the glasses to patients at the clinic. The optician should be paid a salary for conducting the optical business with a percentage bonus for all work done over a specified amount."

Both of these plans are in actual operation at the present time. One institution in New York has its own plant, while in Cleveland, Lakeside and Mount Sinai hospitals, two exceedingly well administered institutions, have worked out the second method.

Prices Should Be Posted

Under the present system of providing glasses in the clinics of New York, the prices charged vary greatly. Although this fact may be somewhat justified by the difference in workmanship, materials, and size of clientele (clinics handling many patients may be able to charge less) still prices are not always in accordance with the service rendered. In fact, several concrete examples of overcharging have been observed. It is, of course, proper to provide glasses for patients at a price which will meet the cost of the materials and of the opticians' services in the clinic, and also meet, or help to meet, some share of the general expense of maintaining the eye clinic.

Nevertheless, the price to the patient for his glasses ought to be moderate, substantially below commercial rates for similar glasses. Any other policy is not only inconsistent with the establishment of a clinic for philanthropic purposes, but also tends to encourage patients to secure eye glasses, without medical examination, from optometrists or department stores.

One safeguard against overcharging is provided by an open list of prices for various types and grades of eye glasses and frames. Three New York institutions have such an "open list." On the prescription blank given the patient when he is sent to the outside optical firm for his glasses are printed prices of the various types of frames and lenses. The patient then knows what his glasses should cost, and overcharging is thus avoided. The section recommended that:

"Prices for all types of glasses should be posted."

Another fault of the present system is the flagrant waste of time and money in doing refraction which does not result in the patient's securing glasses. This is due to the fact that often he does not even order his glasses, or after ordering them, fails to call for them[2]. Sometimes the patient fails to go to the optician because he does not realize how important it is. Again, he fails to call for the glasses after ordering them because he cannot afford to pay for them, and does not know that the clinic will provide them for him if it is necessary. In many cases he is simply careless. The committee found that in two institutions there is a systematic checking of the uncalled for prescriptions with follow-up postals to the patients informing them that the glasses are ready. In the institutions studied, the proportion of glasses which have been ordered but not called for amounts to from 3 to 15 per cent. Many institutions require some deposit on the order, and it has been found that those institutions which demand a certain amount of deposit have fewer glasses left on their hands. The section therefore recommended that:

"A deposit should be required at the time glasses are ordered."

Should Not Restrict Type of Frames

The question of types of frames which patients should be permitted to purchase is open to discussion. The question arises: Can a patient whose economic status presumably compels him to come to a clinic for treatment, afford to buy, for instance, gold frames and should he be permitted to do so? Investigation as shown that often a patient's occupation is such that if he is to wear glasses at all they must not detract from his good appearance. A clerk or a saleswoman, for instance, would probably have difficulty in retaining her position were she compelled to wear steel rimmed goggles. The reasons why some patients do not order glasses after being refracted, or fail to call for them after placing the order, is sometimes found to be the restriction as to type of frames which the clinic will provide. The committee of ophthalmologists therefore recommended that:

"There should be little or no restriction of the types of frames allowed for dispensary patients."

Summary and Recommendations

Recommendations such as made by the committee of ophthalmologists necessarily involve administrative questions which require study and consideration by the superintendents and trustees of hospitals maintaining eye clinics. The administrative point of view has, of course, been taken into consideration in conference and otherwise in making these recommendations.

Criticism and comment on the studies and recommendations of this report are cordially invited from ophthalmologists and administrators interested in eye clinics.

The outstanding point is that a large amount of visual defect exists among persons who cannot afford to pay the cost of securing examinations by expert ophthalmologists at private office rates, with the additional cost of eyeglasses at opticians' regular prices. Skilled service for such persons is hardly to be regarded as charity. From many points of view it should be regarded as an economic necessity—a measure of public economy. It is surely a matter of public interest to see that competent ophthalmological and optician service is available for children whose education cannot proceed satisfactorily unless their vision is corrected. It is of equal and perhaps of more immediate importance that workers who cannot hold positions or earn adequate wages because of imperfect eyesight should have opportunity to secure medical examination and eye glasses when required. The apparently technical facts and recommendations dealt with in the preceding article thus have some public significance.

[2]Edward Hartshorn, M.D., and Michael M. Davis, Jr., Ph.D., Follow-up Work as an Element of Effective Treatment in an Out-Patient Clinic for Eye Diseases, Boston Medical and Surgical Journal, Vol. clxviii, No. 15, pp. 538-542, April 10, 1913.

FINANCIERS TURN 'MOVIE' ACTORS TO AID NEW JERSEY HOSPITAL

Thomas W. Lamont and Dwight W. Morrow, partners in J. P. Morgan & Co., and Seward Prosser, chairman of the board of the Bankers Trust Company, of New York, took the leading roles recently in a motion picture depicting the medical and surgical services performed by a general hospital. Under the glare of powerful lights the financiers visited the children's ward, nursery and operating rooms of Englewood Hospital at Englewood, N. J., and under the command of a motion picture director they "registered" surprise, sympathy, joy and consternation.

The scenario, which was donated by Adolph Zukor to the cause of increasing the hospital facilities of the Northern Valley of New Jersey, called for an inspection tour of Englewood Hospital to study the need of bringing the congested conditions there to a safety point. The picture was taken to serve as a part of a campaign through the Northern Valley towns to emphasize the need of a larger and better equipped hospital at Englewood.

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Occupational Therapy and Rehabilitation

Conducted by HERBERT J. HALL, M.D., Devereux Mansion, Marblehead, Mass., and MRS. CARL HENRY DAVIS, Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.
Co-Editors: LORING T. SWAIM, M.D., 372 Marlboro St., Boston Mass., and MISS MARY E. P. LOWNEY, Room 272, State House, Boston, Mass.

THE SCOPE OF REHABILITATION

By MARY E. P. LOWNEY, Boston, Mass.

BEFORE outlining a program to cope with any newly recognized problem, whether it be social, economic or commercial, good sense requires that some concern be given to its scope, urgency, results to be attained, the likely effects, and whether they may be expected to justify the expenditures; in other words, one must know what the problem is, what will it cost and what will be achieved through it? Such questions govern the type of program, its size and cost, and should indicate on which side of profit and loss the balance is likely to fall.

Rehabilitation is a comparatively new undertaking. Until recent years little heed was given to those in our midst who had physical impairments resulting from accident or disease. The general public was content to drop impersonal pennies into the caps of those who displayed their infirmities on the street corners. Individuals pitied those with physical disabilities with whom they were thrown in contact. Upon a successful cripple who had pushed forward by sheer force of determination and real ability was bestowed a wondering admiration accompanied by a lurking fear that he would presently go under. The community had not recognized the underlying meaning or the possibilities of dealing with the problem in a constructive way.

Workmen's Compensation Laws First Step

With the passage of workmen's compensation legislation (the first act to take effect was passed in Wisconsin, May 3, 1911; now forty-two states and three territories have enacted such laws) began a slow and gradual awakening of the public conscience. It began to be admitted that there was economic justification for passing on to the consuming public through the employer at least some part of the charges for awards granted workmen on account of industrial injuries instead of forcing upon the injured the full assumption of loss, as was the prevailing custom under the old employers' liability system except in cases of fault or negligence on the part of the employer. Under these recent compensation acts the charges hit the pocketbooks of all purchasers because they were included in the cost of production the same as expenditures for the repair of mechanical equipment and were covered when the ultimate cost of the finished product was determined. A more lively interest in industrial accidents resulted. The administration of the compensation act by state departments created central bureaus in which specific data were collected. Statistics showing the number and cost of industrial accidents were impressive and efforts toward prevention were commenced through "safety-first" work.

It was not, however, until the World War that concerted attention was given to reclaiming or rehabilitating the victims of these accidents. To be sure, some private agencies had helped to lay the right foundation by making investigations and by otherwise indicating the field and their interest in it. Notable among these efforts was the survey made in Cleveland, Ohio, in 1916. During the war period, the great need for workers and the accomplishments of warring countries for rehabilitating their service men wounded in action furnished the really big impetus for the salvaging of the man power of our civilian wounded. The opportunity afforded at that time for the civilian handicapped to use their remaining powers in the industrial life of the nation, and their demonstrations of ways in which their capabilities could be utilized, aroused the public to the realization that the rehabilitation of large numbers who had been allowed to drift as unproductive consumers was worthy of serious consideration.

No Reliable Statistics on Handicapped

It is to be regretted that no accurate figures for the number of handicapped are available so that for any perspective it becomes necessary to depend upon estimates. Obviously, employment accidents, those on public conveyances, in the street, and in the home, are the sources that contribute the traumatic injuries which result in handicaps. Diseases, congenital or acquired, form the other large division.

The statistics on employment accidents collected by the industrial accident boards of the several states are not comparable because no uniform system of compilation has yet been put into effect. Examining only injuries classified as permanent disabilities, reports show the following numbers of cases.

Year 1915—Ohio	1,621
Year 1917—Michigan	1,624
Year 1918—Oregon	1,213
Year 1918—Illinois	3,914
Year 1918—Utah	109
Year 1919—Oklahoma	336
Year 1920—Massachusetts	1,621
Year 1921—Massachusetts	1,377
Total	11,815

Although these figures are for different years and different jurisdictions and do not include all large industrial states, they are indicative of yearly occurrences in the states mentioned and the total in those few instances

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Stedman's installed in Boston Lying-In Hospital, Boston, Mass.

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St. Mary's Hospital, Duluth, Minn.
Walker Hospital, Evansville, Ind.
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of 11,815 merely suggests the large country-wide frequency of industrial accidents resulting in some permanent anatomical impairment.

The final report of the United States Commission on Industrial Relations contains the following statement: "The annual list of accidents, approximately 35,000 fatalities and 700,000 injuries involving disability of over four weeks, cannot be regarded complacently."

In 1919, there were 149,053 people injured in railroad accidents in the United States. In 1920 in Massachusetts, 13,012 persons not including employes were injured in street railway accidents. In the same state and year 21,182 were injured in automobile accidents. The extent of disability resulting from these injuries is unknown but the group of figures serves to bring out the fact that a total certainly equal to the number of permanent disabilities from employment accidents must be allowed for the same type of disability from non-industrial accidents and diseases. Such an estimate would be very conservative. It has been stated that national averages on fatal accidents show that 25 per cent of the total are industrial while the other 75 per cent are of a public nature or the result of home accidents. The same ratio applied to the non-fatal accidents in the states mentioned above would give for the group a total of 35,445 non-employment accidents. The total then of both classes would be 47,260. From these figures one may compute the totals for the entire forty-eight states and arrive at the estimate of nearly 300,000 more or less serious accidents yearly.

It was found from the Cleveland survey in 1916 that the proportion of cripples of all ages to the total population was 6 per thousand. The Massachusetts census of 1905 reported 17,134 persons maimed, lame and deformed, a ratio of 5.7 per thousand of population. If the Cleveland ratio is applied to the continental population of the United States, the total number of handicapped of all ages in the country is 634,263. As compared with this computation, the other estimate given of nearly 300,000 is decidedly moderate.

What proportion of these accidents result in vocational handicaps is problematic. A bookkeeper for instance who lost a lower limb would not be prevented by that disability from following his usual occupation. On the other hand, a roofer or structural iron worker with the same disability would be seriously handicapped, or a furniture mover with a severe back strain might be forced to change his occupation on account of his physical condition. In other words, even though it were possible to give an accurate statement of the total number of injured or disabled, it would still be necessary to estimate the number vocationally handicapped and who are in need of, or could benefit by, rehabilitation, because other factors must be considered in conjunction with the physical condition. Allowing 10 per cent of the permanent disabilities as representing the proportion susceptible of rehabilitation, the number to be dealt with would then be between 30,000 and 60,000 for the country each year.

It must be borne in mind that the number of vocationally handicapped is cumulative year by year. With a very short life expectancy allowed for each case, one is forced to admit that the totals are appalling. Certainly they indicate a field that should command the best attention and thought of those who are interested in social and economic projects.

Injured Rarely Gets Full Compensation

Millions of dollars are being paid out each year in compensation benefits and in damages for personal injuries. Millions more are a direct loss to the injured persons. In compensable industrial accident cases there is always a part of the loss of wages and very frequently medical bills incurred for which no monetary reimbursement is provided and when the disability extends beyond the maximum set for the compensation period and amount, the full loss for that excess reverts to the injured party. There is a loss to the employers because of the resulting labor turnover and in the lesser efficiency and the destruction of material until the substitute worker is brought up to the standard. The future earning power of the injured is diminished or destroyed. Although still consumers, their impairment as producers spells a loss, not only to them but to the community. In non-industrial or non-compensable cases any damages recovered by the injured follow the delay and expense of a law suit. In either case there is a time when the question of future independence is squarely before the injured person. There also are costs which cannot be measured in dollars and cents. Mere figures can never tell the vast amount of physical and mental suffering that follow in the path of accident and disease, nor the severe tests upon the morale of the disabled and the family group affected. Added to the physical strain and helplessness during convalescence are the worries of more or less straightened financial situations, the drawing nearer to the line of dependency, the pressure of usual responsibilities and the poignant realization that there will be a decided limitation of activities and earning power with a consequent shrinking from the future.

Rehabilitation Soon Pays for Itself

Technically, a rehabilitation is the rendering of a physically handicapped person fit to engage in a remunerative occupation.

Can anyone doubt the wisdom of adequate provision for a medium through which can be saved some part of the enormous waste represented by utilized earning power and which can help to fan the hidden, dying spark of self-respect into a lively fire of hope, ambition and useful effort for the security of the future and improved citizenship? In other words it gets down to a method of conservation of the human resources for the benefit of the individual, of industry, and of the country. If vocational rehabilitation can accomplish the reclamation of those physically disabled by developing and training their remaining capabilities so that they can function efficiently in some suitable occupation, it will have assisted industry in its problem of securing trained workers who can meet the requirements of particular jobs and will have fully justified the expenditure of public money for this purpose of increasing the number of happy, self-satisfied, stable citizens. The amount expended by public departments in the United States for rehabilitation during 1922 was $735,683.39. It follows that if 735 of the handicapped coming to the attention of those departments are enabled to produce during the remainder of their lives $1,000 worth more of material wealth for the country than they otherwise could have done, then rehabilitation will have given a splendid return on the government's financial investment.

"What is this life if, full of care,
We have no time to stand and stare?
No time to stand beneath the boughs
And stare as long as sheep or cows?
No time to see when woods we pass
Where squirrels hide their nuts in grass?
A poor life this if, full of care,
We have no time to stand and stare."

—W. H. Davies.

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OCCUPATIONAL THERAPY EXHIBIT AND PROGRAM AT ALLENTOWN

By MARY L. PUTMAN, Pennsylvania State Department of Public Welfare, Harrisburg

A meeting of widespread interest was recently held at Allentown, Pa. Through the efforts of Dr. William Sandy, distinguished physicians, psychologists, nurses, hospital superintendents, members of hospital boards, social service workers and occupational therapists, in all an audience of over 500, assembled to see the occupational therapy exhibit and hear the program.

Those who heard Mr. van de Wall's splendid paper on music at the Atlantic City convention and those who did not have the opportunity, will alike be interested in the following summary of Mr. van de Wall's address at the Allentown meeting.

For many types of mental disease "he who brings music has the key to the inmost soul of the sick patient," said Mr. van de Wall. Many types of mental cases, notable dementia praecox, may be aroused from their self-centered attention to an interest in things apart from themselves. Besides the entertainments and concerts that are often given in programs *for* patients, music should be developed as an activity *by the patient for the patient.* Patients should be grouped for singing on the wards; adaptations of folk songs and dramatized songs, such as 'Goodnight Ladies' which seems to have a particular appeal for groups of men patients, community singing and costume pageants."

A description was then given in detail of a successful Christmas pageant conducted at Central Islip, Long Island, in 1922. Mr. van de Wall stated that insanity is caused by all kinds of forces, mental, physical and social. In many cases there is a feeling of insurmountable difficulty, dread of disaster. The patient avoids reality and lives in fancy. Music helps to fight this mental tendency and guide the mind to healthier planes, sometimes to a period before the onset of the mental conflict. It enables the mind to concentrate, energizes the will for action. "Music," he declared, "is a recreational activity which serves both as a satisfaction of conscious desires and as a compensation for subconscious repressed cravings, which are either of a socially constructive or destructive nature. It stimulates the human organism to energetic reactions of varying types. Music is, therefore, in its place in an institutional curriculum when it is used as a stimulant of constructive energy in a program which in its totality makes for physical, mental and moral regeneration."

During the afternoon the Danceland Orchestra furnished delightful music. At the conclusion of the addresses the patients in the audiences went to the paltform and under Mr. van de Wall's leadership with orchestral accompaniment rendered the following music:

The Star Spangled Banner.
The Battle Hymn of the Republic.
Sweet and Low.
The Long, Long Trail.

A soprano and alto duet, "All Through the Night," was very pleasing. In turn a women's sextet with chorus, gave "Old Kentucky Home," and a man's sextet of convalescent soldiers sang "Love's Old Sweet Song."

It was interesting to note that the eighty patients singing were a mixed group, picked from various wards, including disturbed as well as convalescent. They had not been previously drilled except for a short rehearsal. Their evident pleasure in singing and responsiveness to the leaders directing was a strong demonstration and appeal for the need of music in institutions as outlined in Mr. van de Wall's talk.

Mrs. Slagle spoke briefly on "Occupational Therapy in Hospitals for Mental Diseases." In opening, she expressed her pleasure in cooperating with the Pennsylvania state program for mental health, and also her interest in the Allentown Hospital and Dr. Klopp's work, which began with her interest in occupational therapy ten years ago. In comparing the occupational programs of today with the first discussion of the subject ten years ago at Johns Hopkins Hospital, Mrs. Slagle emphasized the balanced days for groups of patients in state hospitals; and the twenty-four hour day program that brought into play every type of employe in the state institution where everyone was doing his part under the direction of the physician to help in the restoration process of the mental patient. The importance of the occupational therapy program coming under the medical supervision was stressed. It is obviously not for the occupational therapist to go on the ward and select patients. The physician should know why he does or does not want the patient to have occupational work at a given time. This balanced program was discussed some years ago and is now prevalent in more states than one. Mrs. Slagle stated for those not so familiar with the great problem in state institutions that the problem in Pennsylvania from a numerical standpoint is less than in New York; New York has a population of 40,000 mental cases, Pennsylvania 20,000.

"It is a very difficult thing to know just where to begin and where to end when you want to help all, but obviously the greatest emphasis of our work must be put on the

Two scenes in the occupational therapy workrooms at Allentown State Hospital, Allentown, Pa., where the recent exhibit and program were held.

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dementia praecox cases because they dominate to such an extent in our state hospital population," Mrs. Slagle declared. "We have in New York and other states 65 per cent dementia praecox cases. Among the ex-service men a very much higher percentage; and therefore all those who are given the care of that type of patient must focus their attention in such a way that he may return to community life for the balance of his days."

Mr. T. B. Kidner, president of the national association, spoke on "Occupational Therapy and Industrial Rehabilitation." The rehabilitation of the disabled is an enormous question, he declared. During the World War the nation recognized that it must put every disabled man on his feet, teach him to earn his living, give him an occupation in which he might prove 100 per cent efficient. Mr. Kidner stated that for many years Pennsylvania has been in the lead on the rehabilitation problem. Pennsylvania was doing it before the federal government passed the act. Today thirty-eight states have set up vocational training and hundreds of men are back at work. An example of the need of intelligent solving of the occupational therapy and rehabilitation problem is shown by the following case:

One man, because he was paralyzed from the waist down, has been a recipient of charity, his wife doing what work she could. He was taken hold of by the rehabilitation board under this act. He was taught a trade that he could use and he is at work, earning $35 to $48 a week, and today he is a self-respecting citizen because he is no longer an object of charity.

Hand in hand with doctors who have been working out the problem for occupational therapy in relation to mental cases during the past years, others have been working in their lines, as for instance, the industrial physician in great factories. Some of the best hospitals we have today are factory hospitals. The doctor is working side by side with the recreational adviser in all cities of our land. It is impossible to keep up with the great work of occupational therapy at present. Preparations are being made and workers trained. There is no type of hospital in which occupational therapy cannot be applied without benefit to the patient. Hospitals in any capacity must meet the demand for it and understand what it means.

Mr. Kidner expressed his pleasure in visiting Allentown saying Pennsylvania and the community in which the Allentown Hospital is situated should be congratulated in having one of the best institutions and best occupational therapy departments that he has seen.

OHIO SUPERINTENDENTS AND DIETITIANS WILL MEET THIS MONTH

The ninth annual meeting of the Ohio Hospital Association and the second annual meeting of the Ohio Dietetic Association will be held in conjuncton, May 22-24 at Memorial Hall, Columbus, Ohio. A commercial exhibit will be held in connection with the conventions, headquarters of which are at Hotel Deshler. The following program has been announced:

Tuesday Morning, May 22

Registration.
Meeting of committees.
Inspection of commercial exhibits.

Tuesday Afternoon

Address of Welcome.
President's address, Frank E. Chapman, director, Mount Sinai Hospital, Cleveland.
Report of executive secretary, Mary E. Surbray, Cleveland.
Report of committee on standardization of vacations, C. B. Hildreth, Cleveland.
Report of committee on nursing education, Dr. E. R. Crew, superintendent, Miami Valley Hospital, Dayton.
Address, "The Crippled Child in Ohio" E. F. Allen, president, Ohio Society for Crippled Children, Elyria.
Report of state nurses' meeting, Grace Allison, R.N., principal of training school, Lakeside Hospital, Cleveland.
Report of special committee on building code.
Round table on building problems, Charles F. Amsley, chairman.
Inspection of commercial exhibits.

Wednesday Morning, May 23

Inspection of commercial exhibits.
Round table on administration, Mary E. Yager, superintendent, Maternity and Children's Hospital, Toledo, chairman.
Round table on records and record keeping, Dr. Charles E. Holzer, Holzer Hospital, Gallipolis, chairman.
Address, "The Past, Present and Future of the Ohio Hospital Association," Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, Cincinnati.

Wednesday Afternoon

Address, "The Requisites of Good Hospital Administration," Rev. M. F. Griffin, St. Elizabeth's Hospital, Youngstown.
Round table on housekeeping and laundry, B. W. Stewart, superintendent, Youngstown City Hospital, chairman.
Round table on dietetics, Alice P. Thatcher, superintendent, Christ Hospital, Cincinnati, chairman.
Inspection of commercial exhibits.

Wednesday Evening

Dinner.
Address, F. W. Ramsey, president, Cleveland Welfare Federation and general chairman, Cleveland Community Fund.

Thursday Morning, May 24

Inspection of commercial exhibits.
Address, "The Function of the Sanatoriums in the Antituberculosis Campaign."
Address, "The Problems of the Hospitals from the point of view of:

1. The State Department of Health."
2. The Board of State Charities," Harry Howett, director of Child Care.
3. The Nurse Examining Board," Miss Caroline V. McKee, chief examiner.
4. The Industrial Commission."

Address, "The Work of the Ohio Public Health Association," Dr. R. G. Paterson, executive secretary.
Report of committees.
Constitution and rules.
Membership.
Auditing.
Nominating.
Election of officers.
Unfinished business.
Adjournment.

Among those who will address the dietitians on their three-day program are: Dr. Charles F. Hoover, professor of medicine, Western Reserve University, Cleveland; Dr. A. C. Bachmeyer; Professor Mary E. Parker, head of household administration department, Western Reserve University; and Guy J. Clark, purchasing agent of the Cleveland Hospital Council.

Miss E. Moreland Gerghty is president of the Ohio association and Miss Emma Eggert, secretary.

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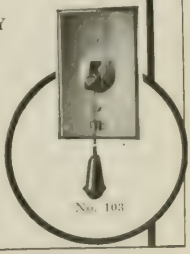

MEETINGS, CONVENTIONS AND CONFERENCES

CONNECTICUT HOSPITAL ASSOCIATION MEETS

THE semi-annual meeting of the Connecticut Hospital Association was held on Saturday, April 7, at Grace Hospital, New Haven. Members and friends to the number of forty-two represented fourteen of the hospitals in Connecticut.

The morning session covered the business transactions, including reports from the various committees. Dr. Bradstreet of Meriden presented the report of the committee on by-laws, which was accepted. These reports were prepared with a view to facilitating the work of the membership committee, and hospitals eligible for membership are clearly classified. It was agreed that hospitals maintaining accredited training schools are eligible without question, and that hospitals not in this class be approved for membership by the executive committee. One of the chief aims of the organization is to help small hospitals and it was opined that this could be accomplished through their membership in the association.

Miss Metcalf of Waterbury submitted the report of the committee on nursing. The committee voiced the need of a full time worker to speak in the various high schools of the state to carry on training school publicity.

The rental of Bal-opticon slides to be circulated through the training schools of the state, providing illustrated lectures on history of nursing, was effected through the donation by the association of $50 for this purpose.

Mr. E. Webber, president of the Stamford Hospital and a member of the legislative committee, reported that there is now a bill before the judiciary committee that would aid hospitals. The bill is entitled "An Act Concerning a Lien on Accident and Liability Insurance policies by Hospitals" and the entire organization voted heartily in favor of it.

After the adjournment of the morning session an hour's recess was enjoyed. The meeting repaired to the attractive solarium on the sixth floor of the new addition, where a delightful luncheon was served by Miss Hunter and her assistants. The comfort of the solarium added to the enjoyment of the afternoon session, which was called to order immediately after luncheon.

The detailed finance report and per capita statistics, prepared and presented by Mr. Sands of Meriden, may be cited in connection with Mr. E. Kent Hubbard's talk on state appropriations to hospitals. Mr. Hubbard is a member of the state board of finance and also president of the Middlesex Hospital, Middletown, Conn. There are thirty-two hospitals receiving state appropriations. Twenty-eight of these sent reports of their financial condition to the state boards of finance, from which Mr. Sands prepared his interesting statistics. Last year the state paid $3,118,383 to these twenty-eight hospitals. As 72,063 patients were cared for, this means that the state paid approximately $43.27 per patient. It is not the desire of the board of finance to favor one hospital or slight another in the matter of appropriations. Heretofore hospitals have had the privilege of requesting the needed amount. Since it is not advisable that each hospital should appear personally before the board, it is suggested that a committee composed of a representative from each hospital in the state be the agent to determine the amount of money needed for their proper conduct. Due consideration should be given to endowments, yearly losses and gains and the resulting decision should be submitted to the state board of finance for careful consideration.

Dr. Lewis A. Sexton, superintendent of Hartford Hospital, again referred to the urgent need of state infirmary for chronic and incurable cases. Many such patients are now in hospitals, thereby excluding others with acute conditions which demand immediate care. At the same time hospitals are turning away numerous chronic cases, which are deserving of every consideration that the state of Connecticut can give them.

The round table showed that practically all hospitals are facing the same every day problems, and much help was gained from the rapid fire of questions and answers which enlivened the discussions. The topics under consideration covered a wide range, including inquiries as to the rules governing time of visits of the hospital medical staffs; reduction in hospital rates to doctors and clergymen; the intern and the history; medical follow-up notes on charts and group nursing. Regarding this last topic information was volunteered from but one member, who related how the question is handled by a hospital in Minnesota. This hospital was paying the nurses five dollars a day and the nurses lived out. Two patients were taken care of by each nurse on twelve hour duty with hours off. The charge for the private room without the nurse was six dollars and with day and night nurses, with board, the charge was $14.75 per day. In order to establish this group nursing in a hospital, it would be necessary that such nurses be guaranteed a continuous demand for their services.

The advisability of registering in New York state was discussed. Seven of the hospitals represented were registered in New York. Since New York maintains such a definite standard in allowing nurses to register and since the cost would be only the expenses of an inspector to visit the training school annually, it was considered very advantageous to give nurses the privilege of registering in New York.

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

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JANE FRANCES BROWN BUILDING FOR PRIVATE PATIENTS AT RHODE ISLAND HOSPITAL

By WARREN C. HILL, of Kendall, Taylor & Co., Architects, Boston.

THE Jane Frances Brown Building for Private Patients of Rhode Island Hospital at Providence, which was opened on June 12, 1922, was made possible through a legacy from the woman for whom it is named, supplemented by the generosity of half a dozen of her friends, who took great interest in the completion, equipping and furnishing of the building which cost upwards of $800,000. In addition, these philanthropic citizens of Providence have underwritten the maintenance of the building until such time as it shall be wholly self-supporting, and it is hoped and expected that in addition to this it will also provide a surplus that can be used in connection with the charitable work of the other branches of the hospital. Accommodations are provided for eighty-six patients and without difficulty these can be increased to care for 100 under certain conditions.

Main entrance detail of the Jane Frances Brown Building for Private Patients for Rhode Island Hospital, Providence.

Many months were taken by those responsible for the building in studying the best of similar structures in other states and in investigating methods and types of equipment, before a single line of the plans or specifications was put upon paper or any definite plan made.

Suggestion after suggestion was made, investigated, and adopted or discarded, as it fitted or failed to fit into the prime motive, which was to provide a building designed to care for sick and injured persons who are able and willing to pay for the best there is, both in care and surroundings.

There was no haste to get the building up and into operation. If a little delay meant the possibility of adding another feature that would contribute to the effectiveness of the plan, the delay was welcomed. The result is that, besides being a complete hospital of the most modern type, the Jane Frances Brown Building is something more. It is a home for the sick and injured; a place where they may have not only the kind of care that would be impossible except at such an up-to-

date medical and surgical institution, but also the countless comforts, conveniences and luxuries which go with the home life of the well-to-do.

The location is on the north side of the spacious park surrounding the hospital and faces south and towards the grove of beautiful old elms, looking through these and to the small lake on the southeast end of the grounds. The building is five stories in height with a greater part of the lower or ground floor out of ground, is "half H" in configuration, 145 feet on the long axis with a projection south at each end 40 feet long.

Limestone and red Barrington (R. I.) brick were the materials used for the external treatment, and every endeavor was made to avoid the customary and oft-times difficult-to-avoid institutional atmosphere of a hospital building. In time planting against the building and gardens where the broad lawns are now at the front, will accentuate and enhance the effect desired.

While the ornamental entrance is on the south side on the middle terrace, the principal entrance is on the rear street or driveway therefrom. Here provisions are made for vehicular as well as pedestrian traffic. Both of these entrances are at the first floor level, the former entering the waiting room through a vestibule, the latter to the waiting room from the other side and to the elevator lobby. There is a service or ambulance entrance on the east, on the ground floor, and on the west on the first floor, for emergency purposes only.

Underground Connection Between Buildings

There is an underground connection between the ground floor of the building and the basement of the main hospital, and to overcome a difference of some 18 feet in the levels of the two floors, an electric elevator has been put in, as well as a concrete staircase. In this tunnel are the steam supplies, both high and low pressure, and electric cables from the main power plant. Aside from these and the laundry and x-ray service, the Brown Building is operated and maintained as if it were a separate hospital.

The basement has a considerable amount of space yet unassigned; doubtless this will in time be devoted to x-ray work and possibly hydro- or electro-therapy.

Two rooms adjacent to the east entrance, with attendant toilets are for emergency or cases not admitted at the other entrances. The two staircases extending from this floor to the roof are, of course, fireproof (despite their height they are very light) and are of easy access to the tunnel at the west, or the entrance just referred to. Two large electric passenger elevators run from the ground floor to the upper floor—the west one is used also for food and general service and is equipped for two methods of control—automatic or with an operator. The other car is run only by an operator during such portions of the day as it is required. The machines are over the shafts to economize on floor space, and no complaint is made of noise or vibration therefrom.

The general linen room is particularly well equipped, not only for storage, but marking, mending, etc.

The south end of the west wing is used as sitting, dressing and locker rooms for special nurses. The sitting room is, as it should be, practical and attractive.

Kitchen is Well Thought Out

The kitchen with its attendant rooms and offices occupies practically the rest of this floor and, while compact in layout, is efficient and convenient. The space for vegetable preparation, ice cream making and storage are separate from the kitchen proper, across the hall. Like all present-day buildings of this character, the service of hot food was given a great deal of consideration to insure a system of food preparation and distribution which makes possible not only the serving of the best foods and the widest variety of them, but also makes certain that they come to the patient at exactly the temperature desired, whether it be steaming hot or ice cold.

The kitchen is in the northwest corner, and from there to every patient's room the exact system of distribution has been worked out. The system planned and the equipment provided represent what experts believe is equal to the best there is. The kitchen equipment includes an electric range, with five distinct shelf ovens, so that as many different articles may be cooked at the same time.

There also are a large gas range and gas broiler. This and the electric range are so placed that a single glass hood is hung over them, with an exhaust fan on the roof, by which all fumes from the cooking are drawn out of the building. The use of glass hood permits the outside light to flood through and does away with the necessity for artificial light during the day.

For the cooking of vegetables, two large steam cookers and two aluminum kettles have been installed. There is a wide variety of steam table equipment to keep material hot after it has been prepared.

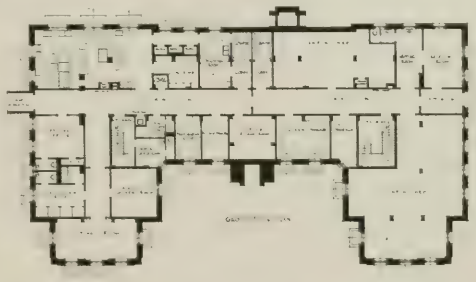
The food distribution system, which centers in the kitchen, has sub-stations or floor kitchens on each of the five floors above. The food prepared in the kitchen is placed in metal food boxes, one

box carrying the food for a whole floor. The sides of the boxes are insulated to hold the heat and in the bottom of each there is an asbestos pad, which is heated before the food is put into the box, and which keeps it hot while there.

When a box has been filled, it is placed upon a truck and sent to whichever floor it is intended for. The floor kitchens, in addition to handling and distributing the foods cooked in the main kitchen, also have facilities for simple order cooking, such as eggs, toast and the like.

Each patient's room is equipped with a mahogany tray with folding legs which can be attached to the bed and extends over it, so that the patient will have his food directly before him, instead of having to be fed or having to reach over to a table at one side. These trays, when not in use, are folded and placed in the wardrobe, or they can be used as a reading or writing table.

When the patient has finished, the dishes are taken back to the floor kitchen, placed in the elevator and sent down to the washing room in the basement. Here they are placed in racks and washed in an electric washer and sterilizer, after which they are returned to the particular floor kitchen to which they belong.



The kitchen has white tile walls and the floors are of large slabs of North River stone which has been used successfully by this hospital in other kitchens for years. Refrigerators are made of cork and cement plaster, given several coats of enamel paint. Each compartment has an automatic door switch.

Arrangement of First Floor

The central section of the first floor is for the public, physicians' and the administration offices.

From the main entrance to the building on the south side is situated the reception room, with floors of Tennessee marble and walls of Caen stone, cut in oblong blocks. The ceiling is vaulted and the furniture rich and dignified and in keeping with the character of the room. In one corner, hotel fashion, are a desk and counter, behind which will be found the clerk or nurse in charge or else in a private office adjacent to the reception room.

Off the southwest corner of the reception room is a small room furnished simply, with telephone equipment at hand. An oil painting in soft, warm tones, on the north wall, gives the touch necessary to make the whole homelike and cheerful. From

SOME GLIMPSES OF NEW PRIVATE PAVILION, RHODE ISLAND HOSPITAL

the lobby, near the Lockwood Street entrance, is another small reception room, in which patients or their friends, who come by motor or on foot, may rest.

The doctors' room is accessible from the rear entrance and elevator, has all needed accessories, and is tastefully furnished.

Wings on the first floor are arranged as two separate services, except the floor or diet kitchen; a "by-pass passage" was put in to keep cross-traffic from the reception room. In other respects this floor is similar to those above.

Mirrors for "Floor Clerk"

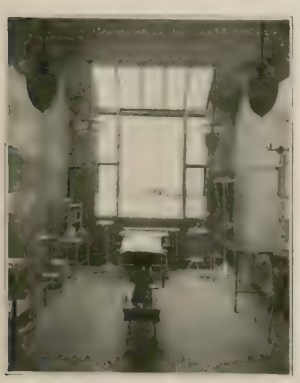
At strategic and convenient points in the second, third and fourth floors are the kitchens previously referred to, work rooms, linen rooms, maids' closets, airing balconies at the north end of the transverse corridors, and at the intersecting angle of these corridors with the long corridors, are mirrors so arranged that the "floor clerk" or head nurse from her station in the center of the building opposite the elevator vestibule, may have the entire floor under observation.

Drinking fountains have "chilled" water; the floor kitchens have electrically operated refrigerators which also freeze cube ice.

Patients' Rooms Carefully Designed

The rooms for patients are all designed along the same plan and, although some vary in details, one is practically the same as another. Each room has toilet and lavatory facilities directly connected and practically all have baths adjacent.

Much attention was given the matter of hospital beds, with the result that a patented, adjustable bed has been selected which has an arrangement for raising the head or foot or both to any desired height by the turning of a handle similar to that used in cranking an old-time motor car.



View of an operating room in the private pavilion.

The furniture is comfortable and homelike; the mirrors are separate and hung as a picture; each room has a wardrobe, those for two beds being double, generally. The furniture is a delicate gray with a narrow heliotrope pencil line. Floors are of three-sixteenth inch green linoleum with the usual coved base, of pink marble terrazzo.

The dignified reception room of the building, with its desk, hotel-fashion, in one corner.

Each room is equipped of course with the usual signal, signal emergency, heating and bedside lighting plugs, and telephone outlets. The latter have removable jacks, so that a phone is in position only when permitted; the bell boxes are placed on the under side of the lower shelf of the bedside table, instead of on the wall.

Lighting fixtures contain two lamps, each separately controlled, and are of a particularly pleasing but simple pattern, with etched glass.

Double window shades were used in the rooms, the outer one of dark green Holland the same as all the other windows, and the inner of a cream colored Holland. In addition the windows have pleasing draperies of marquisette with valances.

A three-fold bedside screen of a pattern used by the Rhode Island Hospital, in mahogany with silk "fillers," is part of the equipment for each bedside, also.

Solariums have heather tile floors and when the casements are fully opened are really screened-in verandas; to enhance this effect each opening has a modified type of Venetian blinds made of waterproof fabric. On the other hand, these rooms are provided with heat for the colder days of the year.

The east end of the fifth floor is similar to the others except as the plans indicate; the west end is taken up by the operating department.

Provision for Maternity Cases

The Rhode Island Hospital has never had a maternity service, but is affiliated with a local maternity hospital. Subsequent to the completion of the plans it was thought desirable, for a period at least, to care for private maternity cases. Consequently, the whole of the fourth, and the east-

erly end of the fifth floor, were set apart for this work, accounting for the variation in the northeast corner of the plans in these two floors which, in this respect, were originally identical with the others. The two nurseries are on the fourth and the delivery rooms are on the fifth floor.

Quoting Dr. John M. Peters, the superintendent:

"Every effort has been made in outlining the technical advantages of the building to provide the facilities, necessities and conveniences that are demanded by physicians and surgeons in the care of their patients. These include three operating rooms with modern facilities, which mean so much; equipment for giving such forms of anesthesia as nitrous oxide, ethylchloride and ether; laboratory facilities for doing quick, accurate work so necessary to the surgeon and physician in helping him to form an opinion or diagnosis; a complete set of surgical instruments and special instruments needed in special departments, such as in the case of eye, ear, nose and throat conditions; many pieces of special apparatus, ingenious and intricate in their development and construction, but of great assistance to the surgeon in his work; four or five operating tables, each different and built especially for the convenience and help of the surgeon in doing his work; four operating rooms, three built with overhead light and windows facing the north so as to get the best light, lighted at night by electric lights so spaced that it is expected that shadows on the field of operation will be avoided.

"The floors and walls of the operating rooms, to a height of seven feet are covered with Tennessee marble, laid in large slabs, thus avoiding the many joints necessary in laying small tile. Walls and ceilings of these rooms are painted in a quiet color, the effort being to avoid white, which was formerly thought necessary in such rooms and which is so trying to the eyes of the surgeon and his assistants.

"A special 'dark' operating room is provided for the use of eye, ear, nose and throat surgeons, who, in many operations, must do their work in absolute darkness because of their dependence on concentrated reflected light."

Heating and Plumbing Up-to-Date

The heating is by direct low pressure steam modulating system; there is no indirect heat in the building. The building has a very complete exhaust fan system divided into groups, the operating and sterilizing room, the main kitchen and sub-kitchens; the toilets and work rooms; and the last group having two fans, one for the east and one for the west end. Control is from the director's office in the first floor with a dual control in the operating section. "Tell-tale" lights on these control switches save the possible embarrassment of one well known superintendent, who some time ago explaining his new air exhausting devices, was somewhat disconcerted on taking his visitor to the room in which the fans were located, to find they had not been operated for some days.

The plumbing is of the highest grade of vitreous china and porcelain; many special features were incorporated when such were needed, but for general use an acceptable hotel standard was taken. Flush valves were used on all closets and slop hoppers. Hot water is supplied from a 500 gallon tank in the basement pump room.

The most striking feature of the building, to the patient or visitor, is the color schemes. All the doors are stained a brown mahogany and are of wood, except where necessity required metal and these were skilfully treated to resemble the other doors. Door frames are all of metal with a simple moulding thereon matching the mouldings on the window casings (the operating department excepted, of course) and all paint and enamel are of a cream color. The walls vary slightly in the several floors, a soft gray predominating.

The cordial cooperation with the architects of the building committee and the superintendent, who followed with great interest and ability every step in the development of the program and of the construction and equipment of the building, was of very great assistance in attaining the finished result.

UNITED HOSPITAL FUND DISTRIBUTES $550,000 TO 56 HOSPITALS

Fifty-six hospitals in New York City that provide free care for the poor shared in the allotment of $550,000, which was distributed April 25. Hospitals in Manhattan and the Bronx received $474,976 and those in Brooklyn, $75,024. The sum represents the total raised in the annual collection for the United Hospital Fund, which was recently completed, and is $25,000 greater than the amount distributed a year ago.

The hospitals and their share of the fund's distribution are as follows:

Mt. Sinai, $37,366.01; St. Luke's, $32,066.12; New York, $22,105.46; Presbyterian, $21,908.59; Lenox Hill, $17,891.16; Lincoln, $15,999.11; Post Graduate, $15,516.84; Roosevelt, $13,925.36; Beth Israel, $10,682.97; Lebanon, $10,128.43; Flower, $9,622.26; St. Mark's, $6,647.91; French, $5,301.11; Fifth Avenue, $4,526.48; Knickerbocker, $3,249.36; Broad Street, $3,101.81; Community, $2,705.48; Beekman Street, $1,183.92; Lying In, $21,291.34; Sloane, $17,644.42; Woman's, $11,398.99; St. Mary's Free, $11,195.57; Nursery and Child's, $10,068.59; Misericordia, $7,690.86; Babies, $6,156.08; Jewish Maternity, $4,862.15; Infirmary, Women and Children, $4,605.99; Manhattan Maternity, $2,728.29; Orthopedic, $23,829.60; Ruptured and Crippled, $10,289.92; Joint Diseases, $1,800.92; Reconstruction, $1,745.18; Manhattan Eye, Ear and Throat, $7,376.23; New York Eye and Ear, $7,070.47; Herman Knapp, $2,009.54; Ophthalmic, $984.89; Skin and Cancer, $5,441.29; Memorial, $5,017.49; Neurological, $2,504.24; Montefiore, $45,931.24; Home for Incurables, $11,359.24; House of Rest, $6,807.07; Isabella Home, $5,788.98; House of the Holy Comforter, $4,294.64; St. Andrews, $1,154.98; Long Island College, $16,886.59; Jewish, $12,088.38; Brooklyn, $10,250.98; Methodist Episcopal, $8,292.67; Wyckoff Heights, $6,680.70; House of St. Giles, $4,691.65; St. Christopher's, $4,159.66; St. John's, $4,108.83; Norwegian, $3,567.82; Williamsburgh, $2,417.76; Prospect Heights, $1,878.38.

THE COMMUNITY CHEST—ITS ADVANTAGES AND DISADVANTAGES*

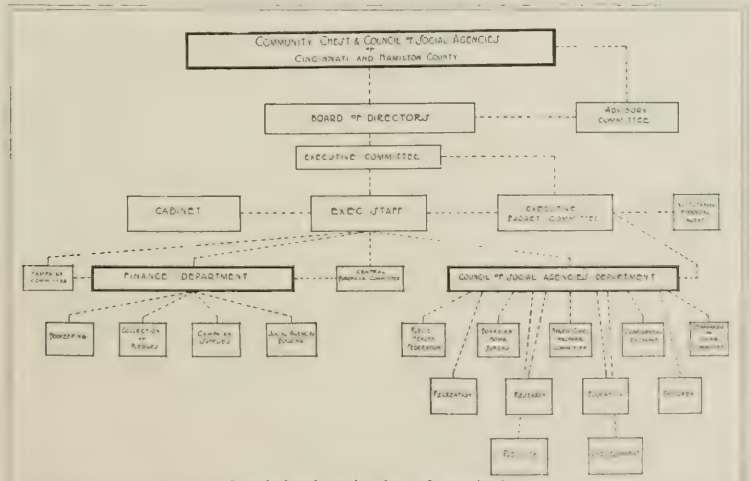
By FRANK E. CHAPMAN, Director, Mount Sinai Hospital, Cleveland.

IN PRESENTING this symposium of the advantages accruing from and disadvantages incident to the operation of a Community Chest, it may seem unfair to have it drawn by one who is so unqualifiedly a supporter of the idea, and who subscribes so thoroughly to the operation of a properly conducted Community Chest. The author has carefully refrained, except in very infinitesimal details of explanation and in the summary, from offering any personal comment or opinion, but has quoted or interpreted the opinions of those to whom the subject was broached and who volunteered the subject matter contained herein.

Letters of inquiry were sent to ten cities in the United States, and one city in Canada. These letters were sent not only to the executive officer of the chest, to get certain information from him, but to hospital executives in these cities. No attempt was made to send inquiries to all the hospitals in a given city, but to executives of representative types of hospitals in each of the municipalities under discussion.

There have been submitted to the readers of THE MODERN HOSPITAL in the last two issues, an article by Elwood Street, director of the Community Chest of the city of St. Louis, and another by Charles E. Adams, general chairman of the Community Chest of Cleveland, outlining the basic principles, ideals and ideas of the Chest movement. These articles have dwelt on the principles and ideals but have not in a very large measure set up the actual operation of the Chest. It is the intent of this article to crystallize the mechanism of the Chest and to present a composite of the points of view of those who are beneficiaries thereof, setting forth specifically a statement of the advantages and disadvantages that obtain.

The similarity of the charts of organization of the various Community Chests in different parts of the country is so apparent as to merit specific comment. There are, of course, slight variations of detail to meet local situations, but in the main the type of administration and the line of control is almost identical. There is submitted herewith a chart of organization of the Community Chest of Cincinnati and Hamilton County. This chart is used as illustrative of the general type of organization, by reason of the fact that it presents it in the most concise form available.



A typical and concise chart of organization.

In calling attention to this chart it is desired to emphasize only one of the many basic points therein, and that is the definite group control of the community service bureau and of the commun-

*The third and final article in a series evaluating the Community Chest idea.

ity financial service. It is apparent that the cities in which the Chest is meeting the highest degree of success are those in which there is the highest coordination of the work of the various service agencies.

All of the chests are administered by boards of trustees with executive committees thereof, and with but two exceptions executive budget committees and investigation committees. The line of control is definitely and uniformly established in all of the groups, as is indicated on this chart.

Some time prior to the annual drive, there is prepared and submitted by the individual subsidiaries of the Chest a statement of budget requirements for the following year, this statement comprising a detailed statement of expense, of income, and approximate deficit that may accrue from operation. This budget is analyzed very carefully by the budget committee (the committee being generally divided into small service group committees) and then is either approved as submitted, or adjusted in conference, and submitted with approval to the executive committee of the Community Chest. The accumulated total of all of these budgets becomes the Community Chest goal for the following year.

In all but two instances, each subsidiary or beneficiary of the Chest makes a monthly statement along accepted uniform accounting methods These reports are checked as to their compliance with their budget allowance, and are used as an index to the efficiency of performance of the individual institution. These statements of performance, in addition to carrying figures of financial performance, give a statement of vital performance.

In order that the reader may grasp the scope of this work as it pertains to hospitals in the ten cities solicited, there is given herein a list of those cities together with the approximate percentage of budget requirements of the hospital that is provided for by the Community Chest. It will be noted that in three of these communities no hospital budgets are included in the Chest, but that in the balance of the communities the hospital budgetary allowance is from 13 per cent to 27 per cent of the total operating expense. Cincinnati and Philadelphia have each a large municipal hospital that takes care of the major portion of the free work of the community. In Detroit it will be noted that four of the largest hospitals only are beneficiaries of the Chest and then only for limited purposes.

Cleveland—22%.
Cincinnati—13%, limited to four hospitals.
Denver, no hospital budget.
Detroit, 15%, limited in some of hospitals.
Indianapolis, no hospital budget.
Milwaukee, only two hospitals.
Philadelphia, 15%.
Rochester, 27%.
Toronto, no hospital budget.
Youngstown, 10%.

It would appear from this that the financial burden that is carried by the Community Chests in a majority of these cities is exceedingly great and offers a solution of a very pressing problem of hospital operation. It might be noted in passing that one hospital states that the Community Chest takes care of 80 per cent of its expense, two of them 40 per cent, and an assumption of 30 per cent of the operating cost is not uncommon.

Advantages Enumerated

As an indication of the advantages of the Chest the following is given:

A. Relief from financial worry and the consequent release of the executive officer for really executive duties is the most invariable primary advantage given.

B. Next in order of importance, in the opinion of those who have furnished information is the opportunity for community education, i. e. the disseminating of the idea of community philanthropy to the community as a whole. The annual drive presents a medium for placing the needs of the philanthropies of the community before the general public in much better form than has been possible in the past.

C. As a corollary to this, is the opportunity for communal participation, or in the words of one of the leaders of the Cleveland Community Chest "spreading the base" of the philanthropic giving of the city. To illustrate specifically this point, fourteen years ago less than 4,600 people gave $5 or more to the philanthropies of Cleveland. (This does not enumerate those giving to the Catholic charities). Today close to 177,000 give to the same group of agencies.

D. Next in importance is given the coordination of the work of the various agencies. The elimination of overlapping and the stimulation of a spirit of friendly cooperation between various groups engaged in the same type of work unquestionably bespeak a higher degree of professional efficiency.

E. With the close check-up of the financial performance and the publicity given vital records of the hospital, there is unquestionably a stimulation to higher standards of business efficiency. This is accomplished in the centralized purchasing bureaus, the formulation and use of standards of purchase, the centralized collection of accounts and many other activities that have been and are being developed in these various communal groups.

There are of course in any scheme as large as this, inherent disadvantages; and these disadvantages as given by those who have furnished the information are listed below:

Disadvantages Given

A. The possibility of creating an impression that there is an inexhaustible supply of funds. To illustrate this point specifically, the chairman of one Community Chest has called attention to the fact that out of every dollar spent in hospital operation in 1914, thirty-one cents was contributed, while in 1923, the contribution demands for the hospitals of the same community is forty-seven cents per dollar spent. Such a statement is food for very serious thought, and but emphasizes the necessity of the closest possible scrutiny of the budget demands of the individual agencies, and a rather autocratic allocation of funds to take care of the services of the various hospitals.*

B. Loss of personal touch. This is expressed in the fear that by reason of the amalgamation of the philanthropic appeal of the community the particular friends of the hospital will lose sight of the intimate operation of that institution.

C. Improper distribution of funds. This is expressed in the statement that is made by one hospital that a larger amount of money in proportion to services rendered was furnished to another hospital than it obtained. This point again emphasizes the absolute necessity of conscientious, scientific management of the Fund and the general acceptance of the equity of that administration by the Community Chest as a whole.

D. The creating of a feeling of ownership by contributors. This thought is expressed by one superintendent, calling attention to the fact that residents of the community are making demands by reason of their contribution to the Community Chest. (If the author may be permitted the comment, this is an advantage rather than a disadvantage. Certainly it would seem highly desirable that our citizens think in possessive terms of their hospitals.)

E. Sacrifice of popular agencies. This thought is expressed by an individual who says that unquestionably individual agencies with a popular appeal can get more money individually than they could by participation in the Chest.

Summary

To summarize the three articles, it cannot help but bring to one a realization of the complete evolution of the philanthropic scheme of a community. In years gone by we were wont to think of our philanthropies in terms of private ownership. The individualistic and, in a large number of institutions, the selfish attitude assumed by the administrators, did not bespeak that high degree of communal cooperation that is beginning to be recognized as essential to the general social scheme of today. With the increasing interest in communal health problems, does it not seem logical that we should begin to think in terms of communal finance of these problems Certainly there is nothing particularly inconsistent in the theory that is expounded. With this growing realization of community need, and the higher degree of cooperation in meeting this demand, the work of philanthropy more nearly approaches the function of a large corporation (or community corporation, if you please). If this premise is at all sound, then can we not apply the same efficiency of finance, of collection, of sales, of production, as is applied in our industry? The scheme will succeed or fail dependent entirely upon the wisdom of its administration. The success of that administration is predicated upon the set-up of a definite mechanism of control of service and of finance. With that control properly established and finances properly allocated, and the further securing of the hearty cooperation of the citizens, this scheme of operation of our philanthropies will unquestionably be better and easier.

*(Note: It is rather interesting to observe that from only two cities among those solicited does there come any specific criticism of the Chest idea, and one of those who furnished most of the adverse comments is not a participant in the Chest).

NEW YORK NURSERY AND CHILD'S HOSPITAL 100 YEARS OLD

New York Nursery and Child's Hospital, the first maternity hospital in America to complete a century of service and the oldest children's and foundlings' hospital in this country, celebrated its 100th birthday on April 29.

At four o'clock on the afternoon of April 29, 1823, a group of doctors and their wives met to form a hospital to specialize in maternity work and thus to lay the foundation for the advancement of obstetrics and medicine on this continent.

The meeting which resulted in the establishment of the hospital was held at the home of Mr. and Mrs. Thomas Darling, at 35 Cortlandt Street which a century ago was in the heart of the residential section of Manhattan. Mrs. Thomas Cock, the wife of a prominent doctor of that time, called the meeting, and invited to it, in addition to her husband, Drs. Gilbert Smith, Peter C. Tappen, Ansel W. Ives, and James C. Bliss.

The result was the adoption of a constitution for the "New York Asylum for Lying-In Women," an institution to provide "comfortable accommodations and skillful medical attendance to reputable females during the period of their confinement."

The population of New York City at that time was 150,000. The stage to Boston and Philadelphia left each noon from No. 1 Cortlandt Street, a few doors from the home of the Darlings.

In the century of its existence, over 75,000 babies, 600 pairs of twins, and three sets of triplets have been born in the hospital.

HARVARD'S HOSPITAL FOR RADIUM THERAPY

By ANNA L. GIBSON, R.N., Superintendent, Collis P. Huntington Memorial Hospital, Harvard University Medical School, Boston, Mass.

COLLIS P. Huntington Memorial Hospital is maintained by the cancer commission of Harvard University for the care and study of cases of cancer and for the treatment of cancer, especially with physical agents such as radium and the x-ray.

The hospital is situated on the grounds of the Harvard Medical School and has accommodation for twenty-two bed patients. A laboratory building has recently been completed adjoining the hospital building which supplies space for an enlarged out-patient department and for special deep therapy x-ray apparatus, as well as laboratories for bio-physics, chemistry and pathology.

Supported by Voluntary Contributions

The main hospital building was built in 1912 as a memorial to the late Collis P. Huntington, but the funds for its maintenance and for the construction and maintenance of the laboratory building, the J. Collins Warren laboratory of bio-physics, have been obtained as voluntary contributions from many generous subscribers who have desired to promote the study of the cause and treatment of cancer as well as to provide for the care of patients afflicted with advanced cancer for whom only inadequate hospital accommodation is available in this community.

Emanation apparatus in the vault where the radium is stored.

The invested funds of the commission yield an annual income of about $20,000, and annual subscriptions are obtained from persons interested in the work of the commission amounting usually to about $16,000. Special grants and contributions have also been made to the work of the hospital and of the laboratories from time to time, so that approximately $40,000 annually is available for the commission's work. This sum is supplemented, however, by the income received by the hospital for the board and treatment of patients who are able to pay in whole or in part for their accommodation. In the fiscal year 1920-1921 the amount thus received was approximately $40,000, making an annual income of about $80,000 from which both the hospital and the laboratories have to be maintained.

The hospital building contains two wards, each of eight beds, and six private rooms. Patients are received at the hospital on the recommendation of their physicians, and after examination and diagnosis treatment is advised. Operative cases are, as a rule, referred to other established institutions although a few operative cases are received at the hospital, especially those in which some combination of x-ray or radium treatment and operative measures may be contemplated. All cases are received at the hospital irrespective of race, creed or financial condition if the physical condition of the patient justifies any treatment that can be supplied. Charity cases are received in the wards, but patients who can afford to pay the whole or a part of the regular hospital charges are expected to do so, the payment being credited in part to board and nursing care and in part to treatment.

Ward beds are rated at $3 and private rooms from $7 to $10 per day. During the last fiscal year, of 1,383 house patients 238 received free treatment, 834 paid $3 a day for a private room. Of the hospital income, $40,000, about one-half is credited to radium treatment and operations, and one-half to hospital board and care of patients. No private patients are received or treated except as private patients of the Huntington Hospital. The members of the staff receive small salaries and make no individual charges to patients for their services.

Follow-up Patients Throughout Life

A system of records has been in operation since the opening of the hospital, 1912, which was devised by the then resident physician, Dr. Thomas Ordway. The records are typewritten (in duplicate) and notes are dictated by the staff at each visit, while records of treatments are made in long hand and initialed by the attendant physician, before being copied in the record. A fol-

low-up system is also provided, whereby patients not reporting after six months as requested, are automatically investigated. No record is closed and no patient is discharged until evidence of death is obtained from friends or municipal records.

The Huntington Hospital owns one gram of radium, which is kept in solution in a vault under the new laboratory building. The radium laboratory is in charge of Professor William Duane, who came to Boston in 1912, direct from Paris where he had been conducting investigations in radio-activity in the laboratory of Professor and Madame Curie. He is responsible for the collection and measurement of the radium emanation and advises as to dosage, screening, distance, duration and frequency of application. Professor Duane has devised a machine for collecting and purifying the emanation, and this method has been adopted by a number of the leading institutions in the United States which have large amounts of radium.

Applying a radium treatment. A steel tube of emanation is shown on a strip of adhesive plaster.

The manipulation of the emanation is a highly technical process and necessitates the services of a staff of specially trained assistants, whose measurements of its initial radio-activity and its subsequent variations can be relied upon.

Emanation Method is Advantageous

With the same dosage the effectiveness of emanation is no greater than when the radium salts themselves are used in tubes or flat applicators. The emanation method has certain advantages, however, which make it the method of choice. It is not ordinarily considered advisable to set up an apparatus for the production of emanation unless as much as one gram of radium is available, and unless institutions have sufficient resources to enable them to bear the burden of expense. Radium in quantities less than a gram does not lend itself readily for emanation purposes. Small quantities of the elements are better put into platinum needles and surface applicators. From the clinical side it makes no difference in the final result whether element or emanation is used provided the number of radio-activity units is the same during the treatment.

The advantages of the emanation methods appear to be (a) that the danger of losing the radium is reduced to a minimum, (b) that a greater flexibility is obtained, (c) that a large quantity of radio-activity of long life, like radium, cannot possibly get lodged in the patient's system by accident. In addition radium emanation possesses certain advantages. Being a gas it is both compressible and expansible, and these qualities are peculiarly valuable in the making of applicators, it being possible to concentrate the gas and to prepare a tube of equal activity to any given radium salt tube but only one-twentieth of its size. This is of great use in the treatment of small malignant growths or tiny nodules of recurrence, enabling an intensely powerful radiation to be given in a very small area.

The radium element, which is in the form of bromide in solution, is stored in a small safe, and this safe is permanently placed in a specially constructed concrete vault with burglar-proof doors. In the vault there is also located the first set of vacuum pumps connected with the radium in solution, and these pumps are connected with another set of mercury pumps outside of the vault by means of glass tubes which pass through the concrete wall; this apparatus contains the radium emanation which is given off by the radium in solution. The amount of emanation on hand at any time cannot exceed in activity the amount of radium in solution, and for several reasons this maximum is never reached.

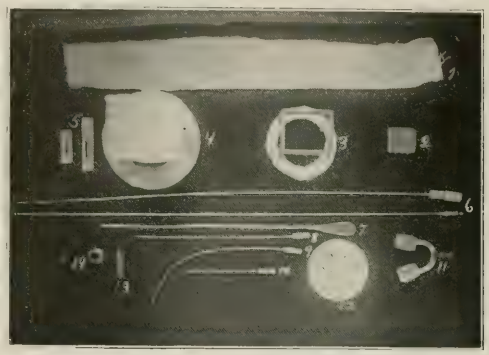
Special protection has been installed for the technicians who draw off the emanation, such as

Treatment room, showing cubicle arrangement for segregating patients

powerful electric fans which are turned on before they enter the vault. These fans completely change the air and remove all trace of mercury vapors and emanation. After the emanation is obtained it is sealed in small glass tubes of two

general sizes. The larger tubes are 0.5 mm. in diameter, 10 mm. long and contain 50 to 200 millicuries. The smaller tubes or "seeds" are about 0.3 mm. in diameter, 3 mm. long, and contain 1 to 4 millicuries. The millicurie or unit in which quantities of emanation are expressed has been defined to be the quantity of emanation that is in equilibrium with one milligram of radium element.

The larger tubes are put into sharply pointed steel jackets. A flattened head on the end of each jacket has an alphabetical letter so that it may be easily distinguished from the others. The smaller glass seeds are used for insertion into tumor masses by means of a trocar. The tubes are measured and carried to the treatment room where they are placed in a lead receptacle, 8 cm. thick.



KEY TO PICTURE OF APPLICATORS.

1. Gauze roll.
2. Lead box receptacle for steel tubes of emanation.
3. Applicator for elevating radium, used in deep therapy.
4. Air screening applicator ready for use.
   (Steel tubes are placed in lead box and the gauze roll wound around the box, then fastened to top of applicator.)
5. Steel tubes containing emanation.
6. Long trocars for seed insertion into esophagus.
7. Intra-uterine applicator.
8, 9, 10. Short trocars.
11. Mouth applicator.
12. Small capillary glass tubes or "seeds" containing the emanation.
13. Lead cylindrical applicator.
14. Cones for small surface applications.

A graduate nurse of exceptional ability and intelligence takes charge of the emanation which is ready to be used in treatments. She instructs the nurses, who assist the physicians in applying the radium, in the proper handling of the applicators, and in the precautions necessary to avoid serious effects from careless handling of the radium.

During the past year many references have been made in medical literature to the dangers encountered by those who work more or less constantly with radium. Radium workers are subject to widely different amounts of irradiation varying as they work near to or distant from radium and according to the period of exposure. Clinical workers are especially exposed.

Observations in England, France and Germany, while visiting radium institutes in 1914, led us to note the possibilities of discomfort and injury from contact with the radio-active substances. In London at the Radium Institute the plan was adopted of rotation of service each month for the nurses handling the applicators, and it has been necessary to adopt such a plan at this hospital.

Blood examinations are made on all workers before they enter upon their duties in this department, and the effect from radium upon the blood condition of the radium personnel is carefully checked up each month, so that any changes which occur may be recognized at an early stage, otherwise a profound leucopenia may result, also a mild anemia, accompanied by a high color index.

Radium is administered by the physicians with a trained nurse in attendance. Every case is thoroughly studied by the physicist and surgeon and considered a rule unto itself. No absolutely definite guide is given as to dosage or duration of treatment.

The name of the patient, date of application, the amount used, location of the applicator, time applied, and time of the removal are carefully noted, and the assisting nurse removes the applicator at the stated time. The radium is manipulated behind a lead screen one-half inch thick. The manipulation is carried out as rapidly as possible. The screening and removing of the applicators are carried out by temporary workers and the skilled work is done by members of the staff.

In the out-patient department, after the radium applicator has been removed, each patient receives a slip giving instructions as to how to care for the lesion, and when to report to the hospital for examination. If they do not report within a month a follow-up letter is sent.

During her visit in this country, Mme. Curie repeatedly stated that radium in the hands of the untrained is one of the most dangerous forces in the world, and that such a subtle element, with its all-potent strength and inexhaustible energy, should be controlled and used only by experts especially trained in its use.

Radium, Wrongly Used, is Harmful

It must be remembered that radium may be hurtful as well as beneficial; too small quantities may stimulate, rather than retard or destroy cancerous growth. Through overdose or lack of care in its applications, radium may penetrate hollow organs, as the bladder and intestines, or do irreparable damage to normal structures. A severe septicemia may be caused by too rapid a destruction of normal or malignant tissues.

The staff of the Huntington Hospital takes the position that radio-active agents, such as radium and x-ray, are one of the greatest additions to surgical resources in the treatment of cancer; and always maintains that they should be regarded definitely as supplementing rather than supplanting surgery in the treatment of disease.

THE CLEVELAND HOSPITAL AND HEALTH SURVEY*

By HOWELL WRIGHT, Attorney-at-Law, Director of the Cleveland Hospital Council, Cleveland, Ohio.

THE Hospital and Health Survey is one of the serious ventures of the Cleveland Hospital Council. Undertaken in 1919 that there might be wise hospital and health planning for the city, it was one of the first surveys of its kind in the United States. Fundamental principles in modern hospital and health work were set forth by the Council to be used as a guide by the survey staff. This outline is given here that there may be a better understanding of what was sought to be accomplished:

Outline of Survey

Hospital and health activities have a common purpose; it is better public health and fewer preventable deaths. There are four fundamental contributing factors to the efficient work of all hospital and health organizations working to this end. These are:

Development of medical education, both postgraduate and undergraduate.

Development of nursing education, both general and special.

Advancement of public health and preventive medicine.

Care of the individual sick.

Due consideration must be given to each of these four factors in considering the work of any individual hospital or health organization or group of such organizations or community hospital or health needs.

The survey may be divided into two parts:

I. A survey and study of the existing hospital and health facilities—public or private—of Cleveland. It should determine the contribution which is now being made to the common end by the different institutions individually and collectively; discover ways in which these institutions may be made to contribute more reasonable changes either in the division of labor with other institutions, the volume of work done or contemplated, or in the way of doing the work. This involves a study and survey of:

(1) Medical education in Cleveland as at present conducted.

Use of clinical material and facilities in Cleveland by the medical school for undergraduate instruction, for postgraduate instruction of young medical men, for instruction and development of the medical profession in general.

(2) A study of the nursing education as conducted at present in Cleveland.

Training schools giving general nursing education.

Facilities for providing nurses with special education and training.

(3) The division of health of the city of Cleveland and its relation to the hospitals, dispensaries and other medical institutions and the profession in general. Its activities in the care of contagious diseases and in preventive medicine.

(4) A study of the present existing hospitals and their plans for extension to determine:

The available and contemplated facilities for pay or private room patients, part-pay and ward patients, free patients.

The probable normal needs of the community for each of these classes of accommodations.

(5) A study to determine the present and contemplated facilities as well as the probable normal needs of the city for the care of certain classes of sick: Contagious, including venereal diseases; acute surgical; acute medical; chronic surgical and orthopedic; chronic medical; convalescent; insane and mental diseases; aged and infirm; maternity; babies and children; accident and emergency.

(6) Dispensaries. A study of their location as to their availability to all Cleveland citizens in need; the type of cases receiving treatment therein; the facilities of the various dispensaries to do properly the work undertaken.

II. The second part is a more extended study of the community to determine the ideal number, grouping, location, character and functions of the hospital, medical and health institutions which can best serve Cleveland at present and during the reasonable future development of the city. This entails the following:

(1) Morbidity, accident and mortality rates for the city—as a whole and by districts—based on city statistics, questionnaires to doctors, hospital and dispensary records, industrial commission reports, United States census figures on occupations, races and ages and morbidity censuses in other cities, perhaps house-to-house canvass of selected districts to learn amount of sickness, total and classified.

(2) Care secured by the sick. Economic ability to secure care. Home conditions affecting care. Knowledge or ignorance of existing facilities. Efforts of agencies to reach those needing their care. Constituencies of various hospitals for various groups. Survey of adequacy of home care in typical neighborhoods.

(3) Capacity and facilities of existing agencies for giving the amount of remedial care shown to be needed by studies of the amount and present care of all sickness, accidents, and by prospective increase of population.

(4) The estimated reduction in sickness from extension of preventive medicine and health insurance, based on European experiences.

*This is the second of a series of articles on the history and activities of the Cleveland Hospital Council. The third article to be published in the next issue, will deal with the Council's purchasing service and the principles of cooperative centralized buying.

(5) The medical school's relation to present and future hospitals, dispensaries, sickness prevention and the health department.

(6) The relation of nurse training schools to present and future hospitals, dispensaries, sickness prevention and the health department.

Dr. Haven Emerson of New York City was selected as director of the survey. Funds to meet the expenses, $57,000, were appropriated by the Community Fund. The findings and recommendations were published in December, 1920, after a year's work, in an extensive report consisting of eleven parts, the authors and titles of which are:

Vol. I.	Introduction, General Environment, Sanitation	Dr. Haven Emerson
Vol. II.	Public Health Service, Private Health agencies	Dr. Haven Emerson
Vol. III.	A Program for Child Health	Dr. S. Josephine Baker
Vol. IV.	Tuberculosis	Dr. Donald B. Armstrong
Vol. V.	Venereal Disease	Dr. William Snow Dr. Alec N. Thomson
Vol. VI.	Mental Diseases and Mental Deficiency	Dr. Thomas W. Salmon Dr. Jesse M. W. Scott
Vol. VII.	Industrial Medical Service	Dr. Wade Wright
	Woman and Industry	Mrs. Marie Wright
	Children and Industry	Miss Florence V. Ball
Vol. VIII.	Education and Practice in Medicine, Dentistry, Pharmacy	Dr. Haven Emerson
Vol. IX.	Nursing	Miss Josephine Goldmark
Vol. X.	Hospitals and Dispensaries	Dr. W. L. Babcock Michael M. Davis, Jr.
Vol. XI.	Method of Survey	Dr. Haven Emerson
	Bibliography of Surveys	Dr. G. E. Sturges
	Index.	

Many questions having been asked about the need of the survey, its value and the results, a follow-up volume, entitled "Two Years After" was published by the Council as a reply and answer to those inquiries. In this publication will be found not only critical comments and results but also a summary of suggestions and recommendations which should be helpful in making an acquaintance with the full scope of the program put forth by the survey staff.

The survey reports were, on the whole, well received in Cleveland. The findings and recommendations, though not entirely free from criticism, have been considered and judged as a whole from the point of view of the good in them. In the opinion of the Hospital Council, the survey "not only has paid for itself many times over in dollars and cents but also in increased human values." Reference here can be made only to a few results pertaining to hospitals and dispensaries.

New stimulus was given by the survey to many plans already under contemplation. For example, it is stated that the Hospital and Health Survey came at a time when it proved of special value in assisting to formulate a comprehensive plan for the orthopedic work of the city. A department of nursing education at Western Reserve University had been discussed for a long time before the survey, but it seems fair to say that the survey actually hastened the beginning of this project by re-emphasizing its need. The survey contributed largely to the passage of the $3,500,000 bond issue for the Cleveland City Hospital and its interest in the training school for nurses of that institution was helpful in producing results long before the reports were published. On the strictly business side, a full-time accountant has been added to the staff of the Welfare Federation who has devoted practically his entire time to the improvement and standardization of hospital and dispensary accounting systems. New accounting systems have been installed in eleven hospitals. All of the hospitals now have bookkeepers who have at least some working knowledge of accounting. The survey has paid for itself in the increased efficiency in the hospitals and dispensaries alone resulting from its recommendations in the confidential reports made to each institution.

Typical, progressive steps taken by the hospitals since the survey, some of which are the direct result of the survey, are:

Hospital No. 1. Appointment of an advisory board; organization of staff in the departments in accordance with the requirements of the American College of Surgeons; addition of medical ward for children; improvement in records and filing systems; dental clinic.

Hospital No. 2.—Regular staff meetings; employment of a full-time technician; improved laboratory and x-ray equipment; opened new dispensary with social worker and general medical and surgical services; appointment of a supervisor of nurses and a special teacher for the training school; new living accommodations for nurses; affiliation with a maternity hospital for training of nurses in obstetrics.

Hospital No. 3.—Adoption of new constitution and by-laws designed to bring about a closer working relationship between the trustees and the various hospital executives; appointment of a full-time dispensary executive; appointment of a chief for each dispensary clinic; appointment of a dispensary executive committee; provision of dispensary facilities for the care of neurological cases, diabetes, goiter and surgical dressings.

Hospital No. 4.—New laboratory and x-ray equipment; improved case records; new dispensary with general medical and surgical service and social workers; affiliation with a maternity hospital for three months' nurse training in obstetrics; supervisor of nurses added to the staff; new living quarters for nurses and improved equipment.

Hospital No. 5.—Appointment of an advisory board; installation of record forms recommended by the American College of Surgeons; recognition by the American Medical Association as a special institution for in-

tern training; improvement in policies for care of children.

Hospital No. 6.—Reorganization of medical staff; establishment of a large and well-equipped out-patient department with trained social service staff; improvement in hospital laboratory equipment and facilities for scientific investigation and research; enlargement of the children's department to twenty beds. Sixty "open ward beds."

Hospital No. 7.—Formation of medical executive committee; monthly staff meetings; enlargement of intern staff; improvement of record system and laboratory facilities; appointment of dietitian and assistant.

In a word, the story of hospital and dispensary development during the past ten years, and especially since the survey, is bigger, better and broader community service, at an increased cost, it is true, but entirely commensurate with the results, namely: more days of life and work and happiness to the citizens of Cleveland.

The central dispensary committee of the Hospital Council is one of the direct results of the survey. Its membership includes representatives of some of the hospitals which have out-patient departments, the city commissioner of health and a representative of the academy of medicine. The executive secretary of the Hospital Council serves as secretary of the committee. Its purpose is to improve dispensary standards, formulate policies and plan dispensary development for the community as a whole. The survey findings and recommendations as regards dispensaries received careful consideration by this committee. The committee has assisted in carrying out numerous practical recommendations of the survey and has acted in an advisory capacity not only to individual dispensaries but to the Welfare Federation. It has made recommendations relative to the organization and development and budgets of two new dispensaries which have been opened and are now operating along the lines suggested by this committee. At present the committee is working out a definite procedure for the handling of patients sent to the dispensaries by industrial physicians. Before dispensary budgets are considered for the year 1924, recommendations will be made concerning the development of industrial dispensary service as well as other special and general services.

The survey's emphasis of the need of additional hospital beds in Cleveland has given an added impetus to hospital construction. As a result of passage of the City Hospital bond issue, urged by the survey, 100 new beds for contagious diseases have become available and a new nine-story pavilion with 525 beds for medical, surgical, children and obstetrical cases was opened April 1 of this year. The new Lutheran Hospital with eighty beds has just been occupied. The Western Reserve University Medical School and Hospital group is under way. Work on the medical school building is already begun, and $2,500,000 is being raised now for the first two units of this group, the Babies' Hospital of 100 beds, and the Maternity Hospital of 150 beds.

The survey recommended that Cleveland City Hospital be taken out of politics and placed under the supervision of a board of trustees. This question has been given much consideration by the Hospital Council. The recent report of its special committee on City Hospital, in which the division of labor between that institution and public charitable hospitals of the community is suggested, reemphasizes the great need of a board of trustees for this institution. Other public bodies are being urged to interest themselves and it is hoped that the matter may come definitely before the voters or the City Council at an early date.

During the latter part of 1921, the Hospital Council extended its work by the addition of a collection service, something which had been under contemplation for several years. The basis of its plan of operation is a cooperative combination of well-known principles of hospital social service and business organization and procedure. The central agency recognizes hospital social service principles, applies them in the business of collection and endeavors to eliminate the customary commercial phases of the professional collection agencies. It does not assume the social service functions of the individual hospitals. The Council urges the development of existing social service departments and the opening of new departments as needed. It considers financial investigations as properly a part of the social service investigations made by such departments and emphasizes the fact that the time to discover the patient's ability to pay is when admitted to or while in the hospital. The social service organization or other department of the individual hospital must do this; the central collection agency cannot and does not. The Council seeks to:

(1) Collect "collectable" accounts at the lowest cost.

(2) Prevent "current" accounts from becoming "dead" accounts and reduce to a minimum amounts charged off as "accounts uncollectable."

(3) Fix the status of every account within six months as "collectable," "uncollectable" or "collected."

(4) Reduce amounts to be charged off to a minimum every six months.

This service was started with borrowed money and at first was operated on a commission basis. A committee on collections was appointed, the first chairman being Dr. A. B. Denison, director of Lakeside Hospital, and the present chairman being the president of the Hospital Council, Mr. William J. Raddatz. The executive secretary selected Fred R. Seibert, an attorney at law, to take charge of this service. Having paid its own

way and produced satisfactory results, the Welfare Federation took the point of view that such a common service to the hospitals should be financed by the Community Fund and it has been so financed since March 1922. The actual collections the first year were over $30,000. These were made at a very low cost.

Many far-reaching results have come from this service in the improvement of the admitting system in some of the hospitals. More extensive inquiries are made upon the admission of patients as to their ability to pay. New record systems have been adopted. In addition, some of the hospitals are following up their accounts more systematically before sending them to the Council. Efforts are being made to perfect an ideal procedure, substantially as follows:

(1) Classification of all patients by the hospital as pay, part-pay or free when admitted or before they leave the hospital. (A financial diagnosis).

(2) Proper use by each hospital of the Hospital Council credit information incidental to the admission of patients and particularly those living outside the Community Fund area.

(3) Presentation to each patient immediately upon admission of a printed statement showing the nature of the transaction entered into between the hospital and the patient.

(4) Presentation of a bill to each pay or part-pay patient on or before leaving the hospital.

(5) The sending of a second bill or statement thirty days after discharge and a bill or letter sixty days after discharge to patients who have not paid their bill, before turning an account over to the Council.

(6) Each hospital to turn over to the Hospital Council every account (with adequate pertinent information) when ninety days of age, except those accounts upon which payments or arrangement for payment have been made. By "arrangements for payment" is meant an agreement in writing to pay the account or part of it at a given time, the Hospital Council to have an opportunity to review all such "arrangements for payment."

(7) The prompt handling of all accounts turned over to the Council so that every six months the status of each account will be fixed as "collected," collectable" or "uncollectable."

Council Little Concerned by Imposters

Some hospital authorities have recently been agitating against the so-called hospital "rounder" or imposter. In some states legislation has been sought to protect hospitals from being defrauded by their patrons. In Ohio a bill has just been passed to prevent defrauding of innkeepers and hospitals. What was heretofore a misdemeanor may now be a penitentiary offense; that is, anyone defrauding a hotel or hospital out of board, lodging or other accommodation, may be sentenced to the penitentiary for one to five years.

The Hospital Council believes that the hospital "rounder" is of relatively small consequence and that there is little need of legislation for unpaid hospital bills. As a general proposition, the seeking of such legislation is "putting the cart before the horse." The problem is largely one of admission and classification of patients at the time of admission or soon after; or in other words, prompt and accurate financial diagnosis.

Industrial and Accident Accounts

The collection service is being extended for the handling of all industrial and accident accounts, especially claims against the State Industrial Commission or self-insurers for hospital, medical and nursing care of injured persons. Contracts between the individual hospitals and the State Industrial Commission for the care of injured workmen at the expense of the state insurance fund are now made on the basis of cost. (See May number of THE MODERN HOSPITAL.)

For the sake of uniformity and other reasons, this year the Hospital Council acted as the agent or attorney of the hospitals in the preparation of these contracts. Collective action has always been a fundamental for Cleveland hospitals in dealing with municipal and state departments. To secure the results, therefore, of such action in the handling of industrial and accident accounts, the following plan has been adopted and put into operation:

(1) Each hospital receiving this service authorizes the Hospital Council to act as its agent or attorney in dealing with the Industrial Commission in all its relations with that department of the state as contributor and insurer. The Industrial Commission is notified in each instance of such authority given the Hospital Council.

(2) Each hospital notifies the Hospital Council immediately upon the admission of any injured patient for whose care either the Industrial Commission or a self-insurer is responsible and any such injured patient, the liability for whose hospital care is undetermined. This makes it possible to avoid losses through failure to determine properly the financial responsibility for such cases.

(3) The hospital records of such cases are segregated so that it may be known at any time how many and which cases are industrial accident cases.

(4) All claims and all papers incidental to such claims are filled out at the hospital and sent to the Industrial Commission through the office of the Hospital Council after examination. It is the business of the Hospital Council to see that no papers are filed unless correct in form and substance. The Hospital Council renders special assistance in securing the signature of employers to fee bills.

(5) Payments of claims are made by the Industrial Commission to each hospital and each hospital notifies the Hospital Council of such payments.

(6) The Hospital Council will continue to represent the hospitals in the matter of premium rates assessed against them as contributors to the State Insurance Fund. These rates were recently increased to the surprise of the hospitals. The Council is working on this matter, however, now to determine from the experience of the hospitals for the past five years whether they should continue to contribute to the Fund or take other steps, in accordance with the law, to insure their employes.

(7) Each hospital will report, in accordance with a definite plan soon to be worked out, all of its accident cases. This should enable the Council to follow up such accidents and fix responsibility for payment. It has been found that often in the case of automobile accidents, the party responsible is willing to pay for the hospital care of the injured party but through failure to follow up, expensive law suits have been the result.

ALBERTA'S MUNICIPAL HOSPITAL SYSTEM

By ARTHUR K. WHISTON, Supervisor of Organization, Department of Public Health, Edmonton, Alberta, Canada.

OLIVER CROMWELL once said, "Trust in God, my boys, but keep your powder dry"; the philosophy of this statement meaning, Providence helps those who help themselves.

Year after year all over this continent, hospital, medical and nursing associations have been grappling with the all-important problem—the better care of the sick and the provision of the very best facilities to relieve suffering humanity. The better the service, the greater the cost, and generally speaking, the greater is the burden upon the sick or afflicted.

Is there anything more valuable than human life?

Is there an asset to a country greater than the new-born baby?

If sickness visits a home, is the best service too good?

In a province such as Alberta, which has been described as a country of distances and opportunity, can this service be made readily available when required? This question has been answered in the affirmative by the action of the people of the province themselves.

Municipal Hospitals Act Passed

Upon the statute books of Alberta is to be found an act entitled, "the municipal hospitals act," which provides ways and means whereby the people may help themselves and bring to, within reasonable access, the maximum of hospital service at the minimum cost.

In the early development of a new country, pioneers must necessarily endure hardships and inconveniences, but as development proceeds and population increases the bitter lessons of the past should teach the people to avoid the experiences of those who have broken the trail. It is only a matter of a few years since the first hospital was put in operation in what is now the province of Alberta, but since the province has been formed, development in connection with all health matters has been proceeding rapidly.

Viking Municipal Hospital No. 10 in Alberta, one of the institutions built, maintained and operated by the people of a hospital district and supported by direct taxation.

In this country of great distances, the cost for medical attention and hospital service is extremely high. In fact it is not extravagant to say that many people are burdened with liabilities incurred through sickness. The rural people of the province a few years ago decided that ways and means should be provided to bring adequate hospital service nearer to them and, in consequence, cheapen the expense incurred through sickness.

Ordinary Hospital Beyond Means of People

A hospital to be efficient must be successfully financed. Hospitals operate and keep their doors open, deriving their revenue by a schedule of fees, which, while not extravagant or out of proportion for the service rendered, makes it practically a penalty to be sick if the service is participated in by persons of limited means. In other words, this type of hospital, in order to function, must depend upon revenue derived from so many sick persons at a fixed sum per day, plus the usual extras in accordance with the class of service rendered.

If this type of hospital, even while performing heroic work and giving satisfactory hospital service, was found to be outside the means of the greater majority of the people, then there was only one alternative and that was for the people to assume the burden collectively and by cooperation, and the municipal hospitals act is an exemplification of this endeavor.

What is a municipal hospital in Alberta? A municipal hospital is an up-to-date, modern, fully equipped institution, built, maintained and operated by the people of a hospital district and supported by direct taxation, this revenue supple-

mented by a schedule of fees; a place offering service to the persons liable for hospital taxes and to those who are not by the payment of a fixed annual sum; a place where a man and the dependent members of his family may obtain hospital service including bed, board, nursing attendance, drugs and dressings, and the use of the x-ray where installed, at the rate of one dollar per hospital day.

The revenue necessary to maintain and operate the institution and to provide funds for the annual repayment of debenture indebtedness is derived by direct taxation or from revenue paid by the people individually, while well, through a hospital tax. The funds so obtained guarantee the continual operation of the hospital and constant service to those needing care and attention.

Briefly, the municipal hospital system exemplifies the great command, "Bear ye one another's burdens." How often is it found that when sickness visits a home finances are at a low ebb! Therefore, how imperative that in time of health, we should prepare for sickness!

A municipal hospital is a splendid example of applied brotherhood and true community spirit, and is a very strong link in the binding together of the people of the district which it serves, for the institution is the very exemplification of united effort combined for the common good.

The municipal hospital is governed by an elected board. The capital required for the erection of the building and the annual maintenance and operation charges all are provided by the people of the district. The government pays a per diem allowance of fifty cents per hospital day, under the hospitals ordinance, a similar allowance to that paid any other approved hospital.

The hospital at Mannville is of the type provided in a well-developed community where there is no necessity for outside or district nursing.

Municipal Hospital No. 11 is at High River and in common with other municipal hospitals of the province furnishes services to taxpayers at the rate of $1 per hospital day.

The first municipal hospital in the province was erected in 1919 in the village of Mannville and was placed in operation in October of that year. On December 31, 1921, there were twelve municipal hospitals, nine operating and three in the course of construction.

Space does not permit a full description of the general details in connection with municipal hospital activities, but, by comparison with the year 1920, of the records covering the operation of the institutions for 1922, the following statistics might prove of interest:

	1922	1921	1920
Number of hospital days	60,807	39,995	29,585
Number of patients admitted	5,003	3,098	2,439
Number of maternity cases	855	645	444
Number of major operations	408	345	156
Number of minor operations	1,071	688	424

Drumheller is the largest municipal hospital in the province, having forty-two beds. It is situated in a mining center and, in addition to its general service to ratepayers, is necessarily equipped for emergency and accident cases.

System Solves Problem in New Country

Does the municipal hospital system offer the solution, or provide the panacea for hospital ills? So far as Western Canada is concerned, it would appear that the answer should be in the affirmative for it must be remembered that in a new country, capital flows in, not out. Consequently, institutions cannot, for some years at least, become endowed, and it is apparent that only two

classes of hospitals can function, namely, the institution deriving its revenue from so many sick persons, or the institution of the municipal hospital type which derives its revenue from so many well persons, who when they are sick and desire service, obtain the same at the nominal fee referred to.

Bassano is another of the twelve municipal hospitals in Alberta which derive their revenue from well persons instead of the sick.

HOSPITAL RATES

DISTRICT	RURAL TAX RATE	RATEPAYERS' HOSPITAL RATE
Mannville	.2c and 3 mills	$1.00
Vermilion	.3c and 3 mills	1.00
Drumheller	.3½c per acre	1.00
Islay	.3c per acre	1.00
Carlston	.3c per acre	1.00
Bassano	.4c per acre	1.00
Onoway	.3c per acre	1.50
Viking	.3c per acre	1.00
Hanna	.3c per acre	1.00
Provost	.3c per acre	1.00
High River	.3c per acre	1.00

The people of this province, more particularly the rural residents, are found to be fully in sympathy and accord with this great movement, and it is not unreasonable to expect that within the next few years, hospital service of the type provided under the municipal hospitals act, will be made available to the great majority of the rural people.

Success of One is Ambition of Others

The sound financial guarantee is undoubtedly a happy augury for the future of this type of institution, and efficiency in service will improve consistently with the advances made in the treatment of hospital patients from a hospital standpoint. When it is remembered that municipal hospitals are governed by elected boards representing the people of the hospital districts which the institutions serve, and that through similarity of control and management under a provincial act, comparisons can be made between them, the success of one becomes the ambition of another, and the desire to improve and give the maximum of service at the minimum of cost becomes the aim of the governing boards.

Boards exercise full local autonomy and are responsible to the people. There also exists a uniformity of administration and of professional care of patients which links together each hospital under the supervisions of the minister of health of the province.

FIND COST OF PUBLIC SANATORIUM MAINTENANCE IN ILLINOIS

The maintenance of public tuberculosis sanatoriums will cost eleven counties in Illinois a total of $331,300 during the current year, according to the findings of a survey recently completed by a member of the field staff of the state department of public health. These eleven sanatoriums include only those county institutions now in operation and which are located in the following named counties: Adams, Champaign, DeKalb, Kane, LaSalle, Livingston, McLean, Morgan, Tazewell, Winnebago and Woodford.

The maximum bed capacity of all the eleven sanatoriums combined is 400, while the average number of patients cared for in the institutions is 331. All of the institutions do field work to some extent but most of the available maintenance funds is expended in the care of patients at the institutions. For last year the cost per patient was slightly more than $76 per month or over $900 a year.

An idea of the cost of tuberculosis to the state of Illinois can be imagined when it is remembered that the eleven counties referred to above constitute only about one-tenth of the counties in the state and that the $331,000 which they will spend this year leaves out of consideration the cost of municipal and private tuberculosis sanatoriums—the municipal sanatoriums in Chicago alone having a budget of over a million and a half dollars for the current year. It also leaves out of consideration the money expended by counties that have no sanatoriums but pay for the sanatorium care of patients in available institutions.

AN "AMATEUR BABY"

A Greek father tiptoed up to the door of our premature nursery and whispered to a nurse:

"Can I see my amateur baby?"

Which, considering the workmanship on these unfinished mites, isn't such a bad break, after all.—*Bulletin of New York Nursery and Child's Hospital.*

No accidents are so unlucky but that the wise may draw some advantage from them; nor are there any so lucky but that the foolish may turn them to their own prejudice.—Rochefoucauld.

DEVELOPING THE STATE HOSPITAL PLANT*

"Those who are leading movements for modern treatment and care of the mentally afflicted and who are appealing to the public and to the legislature for funds can, with great benefit to the cause, emphasize the fact that the plant and equipment are quite as important in this work as in any other, whether it be the practice of a profession, the conduct of a commercial business or the operation of an industrial enterprise. The better and more modern the facilities with which to work, the better the output and the lower its cost, management being efficient. The same holds true for a state hospital. Every state hospital should have a comprehensive policy concerning its plant development.

DIAGNOSIS, treatment, cure and prevention are dominant notes in state hospital service today. They occupy first place in those institutions and states that attempt to be modern or to perform their duty by both the taxpayer and the afflicted patient. Custodial attention to that large group of long-time or life-time patients is important and may not be overlooked or minimized. Among such patients, there are possibilities for the improvement of their mental and physical condition, for bettering their environment, for making them happier and more contented and for converting them into economic resources, a possibility as yet too poorly appreciated in many places.

So long as custody was the prime object of the state hospital, plant plan and structure did not require as serious thought as they do today, and this probably accounts for the architect's neglect of them. With the transition of the institution from its primitive form and purpose into its present diversified functions as a true hospital, serving the mentally sick as the general hospital in the civil community serves its physically sick, the planning of both the institution as a whole and of its units has become a vital subject. It is unfortunate that architects have given state hospital planning so little thought and even more deplorable that many executives and administrators have neglected it. Throughout the country there has been too much of a disposition on the part of superintendents to trust the plans entirely to the architect, whether he be the state architect or one selected by the trustees to plan and build a particular building. Yet, in the face of these conditions, there is not today much excuse for any institution erecting new buildings in the dark.

Some states have made fine advance in state hospital architecture and have to offer excellent examples of good planning in units and in groups of units. The National Committee for Mental Hygiene has collected the plans of the best and most modern of these structures and has added to them the results of its own study and experience.

The administrator of a state hospital should have definite ideas of his construction and reconstruction needs, and every hospital should have a comprehensive policy as to its plant development. The board of trustees or the central management sometimes is disposed to impose its own ideas on this matter, but the superintendent who is on the ground should be well fitted to speak and, if he is at all competent and knows his institution and the district it is serving, his views by all means should be considered, both in making up requests for new buildings, in locating them and in designing them to meet the needs which are the greatest.

State hospitals serving metropolitan districts have expanded rapidly in recent years. Those in the rural districts have had slower growth and their building operations have been small. The result is that the former are better equipped to serve in a modern way than the latter, generally speaking. The need for up-to-date equipment is just as great in the rural as in the metropolitan district. The mentally afflicted from the farms and small communities should have and are entitled to as good opportunities to recover their health as those from the great city. It is doubtful that they are enjoying such an equality of opportunity.

Must Educate Public Opinion

State hospitals have grown very much as Topsy grew. None of them has kept pace with the demands upon it for beds. All of them are crowded. A comprehensive plan for the expansion of each institution in a state and of the state group as a whole has been the dream of many an administrator, and many sincere efforts have been made to fix a policy that would prevail and be adhered to for a term of years. So far marked success has not attended these efforts. Institutions get appropriations for new buildings as best and when they can. Legislatures have been slow to

*This is the fourth of a series of articles on state institutions for the mentally ill which is being prepared under the direction of a special committee of the editorial board of THE MODERN HOSPITAL, in cooperation with the National Committee for Mental Hygiene and Mr. A. L. Bowen, former superintendent of charities of the department of public welfare of the state of Illinois.

appreciate the advance which medicine and science have made in this realm. They have not yet absorbed the idea of cure and prevention. At best they are not orderly and give little heed to continuity of progress. The hopeless attitude toward mental diseases, expressed in the sinister old word "insanity," persists and influences both law makers and the public. Liberal sums for hard roads, for state universities, for research along many lines whose profit is apparent can easily be obtained. State hospital service, aided by organized medical science and an enlightened public opinion, must demand with the same force and effectiveness that mental disease be treated as physical sickness is treated, and that measures to prevent mental breakdown be invoked as measures are invoked to prevent physical illness. Under such a pressure the average legislator and political office holder will not be likely to treat with indifference or contempt the scientist's plea for buildings; buildings of a kind that will make it possible for him to work to best advantage for the recovery of the patient and his return to the world as a social and economic unit.

The prospect, however, is not so dark as it may seem. It is gradually sinking in how expensive mental disease is and that economy, if nothing else, demands the restoration of the mental patient. It is gradually coming to be apparent that preventive measures are available though not yet at all adequate, that the mentally sick can be treated and restored and that the state hospital can be made all that its name implies.

It is probably too much to expect the state to raze old buildings that are long out of date and ill adapted even to custodial purposes. These may be made comfortable and safe by the application of ingenuity, and we must resign ourselves to use them for a time to come.

Need of Special Types of Buildings

Out of such old buildings, however, certain types should be moved into structures especially designed to meet their peculiarities. Upon the securing of these, effort must be concentrated. It goes almost without saying that the state hospital should have a hospital building for those who suffer from acute physical sickness. It should be to the state hospital community just what the general hospital is to its civil community. Provision must be made in it for the various manifestations of mental diseases. Otherwise the plans may be those of a general hospital, including adequate provision for surgery. It is a custom in many institutions to devote a portion of the "sick wards" to the infirm and the chronic bed-ridden. This is a mistake. The building should be large enough only to accommodate the physically sick of the institution and to include complete surgery and all dispensary, clinical, teaching and laboratory facilities.

The infirm require a different arrangement. It is essential that they have the maximum of outdoor life in season and sunshine all through the year. For both them and those who care for them, it is well to be near Mother Earth. The bed-ridden chronic cases need still another type of building.

Convalescents, both those recovering from mental affliction and those regaining their physical health, should enjoy the advantages of cottages especially designed for them, where exist cheer, sunshine, communication with life, and where occupational therapy and any other forms of treatment indicated, may be had by each one. The location of such a cottage is important, for its surroundings must be conducive to wholesome thinking and must be pleasant to the eye.

By all means, the acute mental patient must be housed in a structure whose arrangement and environment have been given the most careful thought by those with thorough knowledge of his requirements. In this service there should be ample capacity for the greatest demands that may be made upon it.

A state hospital, with a population of 3,500 and a weekly admission of about 100, erected two receiving cottages. The architect estimated their capacity at eighty. In two weeks the admissions more than filled them. Thereafter, weekly transfer of patients from these cottages to outlying wards to make room for the new arrivals, who came on a certain day, became a fixed policy. It was not unusual for patients to be moved out before a second examination could be made of them, and long before the time when a competent and fair judgment could be passed by the staff upon their condition, what course should be adopted in treatment, etc. And as bad as all this is, these cottages are located in the very center of a crowded and cluttered institution. If there were six such cottages and their population was held to a fair capacity, there would not be too many to constitute this institution's reception service, and their location, where their patients could have a more hopeful outlook, would be very desirable.

Tuberculous patients at a state hospital are numerous, using that term in a broad sense to include the potential and those who would profit by the fresh air and the rich food prescribed for such sick. It is unwise and unsafe to attempt to keep these in large buildings which also shelter other classes. A cottage for the tuberculous must contain all the features of the best tuberculosis hospital designed for civic patients and, in addi-

tion, facilities which consider the bad mental habits of its occupants.

Farm Colonies Have Been Successful

The institution is fortunate that possesses a large tract of tillable land. The success of farm colonies has been impressive. Here, as elsewhere, the temptation is to build too big and in doing so to get away from natural farm life. The small colony, housed as the average farm group is housed in civil life, produces much better results than the large colony, housed in a fireproof, brick and stone structure that will accommodate fifty or seventy-five. Such is better than nothing but the other is best. A thousand acres of good land will readily take care of five or six such colonies, each having its own farm out-buildings, its own cows and poultry, horses, sheep and gardens. Those patients who lived on a farm readily adjust themselves to the colony. There are hundreds on the custodial wards who would find solace and comfort in the free and open communion with nature that the colony permits. It is a simple life without many adjustments. The patient gets along with a minimum of supervision and attention and withal is of considerable economic value. There are great possibilities in these colonies for those who readily adjust themselves to farm life and duties, and even for many who have had no experience on the farm. The opinion of some that the small farm colony is the solution of many of the problems of custody is worthy of study.

Those who are leading movements for modern treatment and care for these mentally afflicted and who are appealing to the public and to the legislature for funds can, with great benefit to the cause, emphasize the fact that the plant and equipment are quite as important in this work as in any other, whether it be the practice of a profession, the conduct of a commercial business or the operation of an industrial enterprise. The better and the more modern the facilities with which to work, the better the output and the lower its cost, management being efficient.

The same holds true for a state hospital.

A NEW DISINFECTANT

Mr. H. had a case of chicken pox in one of his out-buildings, writes Dr. F. Van Allen of Madura, India. A physician not being within miles, Mr. H., for information as to how to disinfect the room, resorted to the family doctor book where he found that the best way to disinfect a room is to put a handful of sulphur on a shovel of live coals.

He turned to his medicine box, which proved to be destitute of sulphur. However, he found a package labeled "Mag. Sulph." "Well, that means great sulphur," he reasoned wisely. So Mr. H's out-building was efficiently disinfected with epsom salts.

MANY HOSPITALS FAIL TO RETURN CENSUS SCHEDULES

The schedules used in taking the census of all the hospitals and dispensaries in the United States still continue to come in, says W. M. Stewart, director of the Bureau of Census, U. S. Department of Commerce. The schedules were sent out the latter part of February and at the end of March returns had been received for 2,499 hospitals and 882 dispensaries. During April, largely as the result of the stimulus given to the work through the notices published in the various hospital magazines, additional returns have been received for 928 hospitals and 481 dispensaries, making a total received to date of 3,427 hospitals and 1,363 dispensaries.

The hospitals and dispensaries conducted by the federal government and by the American Red Cross, under a cooperative arrangement, are to be separately reported by the various agencies controlling them, thus reducing the number of hospitals and dispensaries from which a direct return of schedules is to be made. From reports thus far received, 987 hospitals and 448 dispensaries are said to be no longer in existence, thus further reducing the number of hospitals from which schedules are expected.

Excluding the above classes of hospitals, and dispensaries, there remains a total of 2,498 hospitals and 721 dispensaries for which schedules have not yet been received, representing 42.2 and 34.6 per cent, respectively, of the total number for which returns are expected. The time within which these returns can be made is limited, however, to the close of the fiscal year ending June 30, but it is hoped that prior to that date the census of the hospitals and dispensaries can be reported as complete, at least so far as the return of the schedules is concerned; and this can be made easily possible if all the hospitals and dispensaries not yet accounted for will fill out and send in their schedules without delay.

In some cases replies have been received by the Census Bureau to the effect that the hospital or dispensary was no longer in operation, without specifying the date when it ceased operations. This has necessitated another letter calling for this information, as any hospital or dispensary which was in operation during any part of the calendar year 1922 is expected to make a report covering the portion of the year in which it was in active service. This second letter could be largely avoided, however, if this feature of the work can be brought to the attention of the hospitals and dispensaries thus affected.

HOSPITAL EXHIBITION IN LONDON

A Hospital, Nursing and Midwifery Exhibition was held at Central Hall, Westminster, London, on April 3-7 and was attended widely by medical and administrative staffs of London hospitals and of institutions readily accessible to London.

This is the first year that hospitals have been included in the annual exhibition and the reception committee included Sir Arthur Stanley, G. B. E., president of the British Hospital Association; Sir Napier Burnett, K. B. E., director of Hospital Service to the British Red Cross Society; Lady Acland, and other persons of distinction.

The opening day's program included an address on "Hospital Administration" by Godfrey H. Hamilton, secretary of the National Hospital for the Paralyzed and Epileptic, which was illustrated by motion picture films. Films included scenes in British and American and European Hospitals for purposes of comparison showing x-ray devices, clinics, laboratories, operating theaters, dispensaries, nursing work, bandaging and midwifery subjects.

THE HOSPITAL AND THE NEWSPAPER*

By RALPH WELLES KEELER, Counsellor in Publicity, Board of Hospitals and Homes of the Methodist Episcopal Church.

THE most effective method of getting the aims, purposes, program and achievements of a hospital before the general public is through the newspapers. Most people read the daily paper if they read nothing else. It is our national university to which railroad magnate and day laborer alike turn for knowledge and inspiration. And here, aglow with all that makes for what is called human interest and local color, the story of the increasingly miraculous in hospital service may be told so that it is read by thousands who otherwise would not know that your community boasts a hostel of healing.

The newspaper is the most effective agency for presenting the cause of the hospital to the public, for it is read alike by the railway magnate and day laborer. Since the newspaper is working for the general welfare of the community, it is the natural ally of the hospital. Hospital officials should keep in personal touch with representatives of the local press and be ever willing to cooperate with them. Some ways in which this can be done are by appointing an interpreter to put the alien language of the hospital into common phraseology, by surveying the institution for news stories, by supplying fresh material for the newspaper "morgue"; and by furnishing material for vivid photography.

Newspapers Are Allies

The newspapers of the United States are the friends of such institutions as yours. That there has not always been the fullest understanding and cooperation between hospitals and newspapers has usually been the fault of the individuals on both sides, rather than any fundamental disinclination on the part of the papers themselves.

They have the welfare of the community at heart. They are eager to advance every interest that makes for a better city. Moreover, they are eager for news. It is what they live for. Without it, the day's work is a failure. And they are desirous of the type of news for which the hospital is a clearing house. They are a most helpful ally of the hospital, if the hospital is willing to give them the cooperation necessary to help them function in that role.

Newspaper men and women are just "folks." They are rendering a real service to the community in their special field of endeavor like the rest of us. And they crave the same considerate treatment that all right-minded people desire.

They have had experiences with many people who seek them out to give them news of a character that savors of personal publicity. Or they have dealt with those eager to keep something out of the columns of the newspapers. Hence they look for the motive when anyone comes to them with something they would like to have printed. On the other hand, when a representative of a hospital makes plain the disinterestedness of his purpose, editors and their staffs welcome the news he brings.

This indicates the desirability of establishing a personal relationship with the representatives of local newspapers. Such a personal relationship does not confine its activities to meeting a reporter only when there is "copy" to give him. Make occasion to meet newspaper men in their workshop. Have lunch with them occasionally. Give them a standing invitation to eat at the hospital whenever convenient. Establish genuine friendship with them. And all this not merely for what they print concerning your institution, but also that you may be in constant contact with minds that are alive with the deepest of human experiences and troubles. For out of your casual conversations with these men and women you will get a broader vision of the significance of the task which your hospital is endeavoring to do.

One of the most practical ways of demonstrating a spirit of cooperation with the newspapers of the community is to demonstrate that the door of the hospital is always open to them in their hour of need. It would not take great effort to have a special room endowed for newspaper men and women. Here they would be cared for at a low cost or be given free service. And every man or woman from "cub" reporter up to "the old man" would learn by experience what the institution is doing. They would go forth as grateful and intelligent ambassadors to tell the miracles of healing in all their future days. Many an article written on other subjects would be illustrated by some experience of the hospital days, because of the background given to the writer's thinking during the period of his treatment.

But whatever the relationships you establish with the newspapers, the news that you bring

*This is the second of a comprehensive series of articles on hospital publicity which is being prepared for THE MODERN HOSPITAL by Mr. Keeler.

them must be news. The hospital is full of news. It need not be dull or uninteresting. There is hospital news that is as live and interesting as any news that goes over the city editor's desk. Fortunate is that man who can sense it and write it up. For it is this kind of news that the newspapers welcome.

Some Ways of Helping the Press

Representatives of the press are called upon to "cover" every conceivable kind of news. It is reasonable to assume that they do not have technical knowledge concerning everything with which they are confronted. It is well, therefore, to have someone appointed to act as interpreter to them, that is, to put into every-day language the academic phraseology of physicians, surgeons, dietitians and others who may at a given time be the source of a news story. Hospitals use a language that is strange and alien to the general public, but the substance of what they say is of general interest if put in the language of the street.

Especially is an interpreter needed when a convention is in progress. Have some one on the job who is thoroughly conversant with the purpose of the convention. He should be familiar with the personnel of the gathering. Data concerning what each has done of special significance should be in his hands. A typewritten "who's who" with suggestive information concerning the officers and speakers should be prepared for the press in advance. He should secure digests of the addresses to be delivered and furnish them to reporters and editors before the convention convenes. By marking a release date (day and hour) all danger of their appearing prematurely is obviated. Photographs of the speakers should be secured. Arrangements should be made so that the newspaper photographers may secure pictures of certain individuals or groups. Interviews should be arranged for with specialists who are to be present. Tables shoud be provided for reporters in the front of the room; also messenger and telephone service when desired. If a banquet be a part of the program, remember that reporters eat. This has been forgotten at times and the story printed has been lean and hungry-looking.

Whenever someone of importance in the field of medicine or surgery is to visit your city inform the city editors. Make it possible for them to send someone to interview the distinguished visitor. Use every opportunity to give the newspapers a chance at news that may not be specifically about your own institution. This is a part of the cooperation referred to. It will demonstrate to the editors, as perhaps nothing else will, your desire to play the game for the fullest interests of all concerned.

The Newspaper Morgue

Every newspaper has what is called a "morgue." Here is filed material on men and women against the day of its need. Every conceivable subject is listed here. When news "breaks" concerning men or things it is not always possible to gather the material needed to amplify the story in the time at the newspaper's disposal. The "morgue" furnishes this material. If Dr. C dies half an hour before the time the paper goes to press, it is thus possible to have an adequate obituary ready and in type to go into that issue of the paper.

Information concerning the work of the hospital and its staff should be prepared and furnished every local paper for this purpose. It will be used not only at the time of death, but parts of it may be employed whenever mention is made of any event in which the hospital or individual members of the staff participate. Individual photographs of the staff should also be furnished. When this material has been prepared up to date, it is well to supplement the information from time to time, so that the last word to be said is always in the newspaper "morgue." This task may be made very simple by keeping on file carbon copies of everything prepared and sent out, and having the material brought up to date at stated intervals.

Photographs for Publicity Purposes

Good photographs are always invaluable publicity material. But how few hospitals have first-class photographs taken; that is, first-class not only from the photographic standpoint, but also from the story angle. For a photograph must tell a story itself to be desired for newspaper purposes. The staff huddled together on the front steps of the hospital is not particularly thrilling. Neither is a row of stiffly dressed nurses lined up against a wall, albeit they have their diploma and graduating bouquets in their hands.

But the ambulance unloading a patient with the ever-present crowd pressing for a point of vantage holds our attention. A surgeon operating on the crushed leg of a man arouses us to thoughtfulness. A long line of mothers with children in their arms, waiting their turn at the clinic grips us. And Christmas morning in the children's ward stirs every one of us to tears.

The list of possible human interest pictures is almost without end. They are not visible to the eye of the average hospital photographer, however. Nor does the portrait or commercial photographer always get the right angle. Far

better to get the staff photographer of a local paper to go through the hospital and list up the pictures that ought to be taken. If possible to do so, secure him to take the pictures. Arrange for future pictures to be taken later when occasion presents a suitable setting. See that the local papers have a set of the pictures secured, with accurate captions. Be ready to make arrangements for them to take any pictures they wish on their own initiative.

In connection with the use of photographs to tell the romance of the service of the hospital, it is well to consider the possibility of getting into the pictorial or rotogravure sections of the newspapers. Many papers now carry a full page of "picture news" daily. Here is an opportunity for an occasional place in the sun which will be observed by every reader. For persons of all ages "read" the pictures whatever else they neglect.

The rotogravure section presents the greatest possibilities, however. This is published by many papers in the Sunday edition. The art editor makes diligent search to discover the newest and most unique photographs for these pages. And it is possible, if the hospital will give the fullest cooperation to the art editor, to have an occasional display of hospital scenes done in beautiful sepia or a rich brown. The fact that the hospital is a community institution gives to such a display a sort of civic boosting, and is right in line with the general purpose of the paper. A newspaper in Kansas not long since presented a two-page rotogravure display of the local hospital and the service it is rendering the community. It was an eye-opener to the public. The citizens knew that there was a hospital in the city, but knew little or nothing concerning the work it was doing. As the display was printed during a drive for funds to erect additional buildings, the help rendered was incalculable.

The use of the cartoon is not to be despised. For it tells a story with a laugh in it that makes it remembered. It is well worth while to encourage the cartoonists on the staffs of the local papers to use some feature of the day's work in the hospital in this way from time to time.

The Occasional Feature Story

Occasionally it is possible to have one of the special writers of a newspaper staff write a feature story. This gives opportunity for longer and more detailed treatment than the ordinary write-up.

A recent feature story on "The Nurse, New York's Gift to Humanity," by Arthur Chapman in the *New York Tribune* illustrates admirably what can be done. The article occupied nearly two pages of the magazine section and was profusely illustrated with pictures of nurses at their different tasks. For contrast the following quotation on New York hospital conditions, from a magazine article in 1878, was quoted:

"Previous to the opening of the nurses' school Bellevue was a very much mismanaged institution; three patients sometimes slept on two beds, five patients on three beds, and it happened now and then that they slept on the floor. During two weeks of January, 1876, there was no soap in the hospital, and not enough clothing; many patients had neither pillows or blankets, and 48 per cent of the operations proved fatal, owing, no doubt, to the poison in the walls. But the worst feature was the character of the nurses, who were profane, ignorant, careless, heartless and in most cases utterly unfitted for their positions."

Then followed a history of fifty years of nurse training, which began at Bellevue Hospital and the anniversary of which was celebrated May 8, 1923, at Carnegie Hall. It gave opportunity to put the profession of nursing before the public in a way that was both interesting and appealing. It demonstrated what Bellevue Hospital had accomplished, and it was a fine tribute to the women who are devoting their lives to this form of service for their fellows.

The phases of hospital life that lend themselves to this sort of treatment are many. It should be remembered, though, that someone fully conversant with the facts, to the last detail, must sit down with the feature writer and furnish the raw material which he will transform into an appealing romance. But the time thus spent is well invested.

Suggestions for News Material

The survey or study of the work the hospital is doing now becomes of great value. An addition to a ward gives occasion for a concise statement of the full task being done. The installation of some new equipment makes it possible to give an everyday story of the work to be done with it.

Nurse graduation makes proper a story on nursing in the broader way in which it is being done today. And this field offers place for a story on the rural nurse, the visiting nurse, the industrial nurse and the executive nurse.

Similarly the surgical wards lend themselves for material on strange accidents, unusual bone-settings, the use of artificial limbs, modern advance in surgery and the like. For it will soon be apparent that in the effort to secure publicity for the hospital, you have opened up channels through which to pour information which the general public ought to have.

Then there is the staff. Seldom is the work done by physicians and surgeons in a hospital played up before the public. It is usually the superintendent or financial agent who is featured. Why not let the community know the character of the work your staff is doing. It will have to be done carefully, but all publicity should be done this way. If someone will list up the members of the staff and send the papers an item now and then about each one, it will help tremendously. And without doubt it will please the staff as well.

If a member of the staff writes a book, secure a copy and have it reviewed for the local paper by some one compentent to do it. Emphasize the fact that the author is a member of the hospital staff. If another member is to deliver an address at a convention out-of-town, secure from him a copy of the address and furnish it to the local papers, together with data concerning the convention, for release the day delivered. Have mention made of his relation to the hospital.

The clinic is a never-failing source of good story material. For here come those who live on the borderland of tragedy. And it is a new and varying tale that is told here from day to day.

These suggestions indicate that there is an almost endless list of every-day occurrences which now and then shape up into news, and news that is worth while printing. Your own resources will immediately suggest themselves.

Should Visualize the Story

People think best in the concrete; therefore, it is helpful to put your statistics in such form as to make a picture. There is a hospital that operated on 6,897 people last year. To many people this means more when they know that the number operated on equals the population of Mt. Carmel, Ill., or Webster City, Ia. Forty-three cows manufacture its supply of milk daily, while 85 cows are busy furnishing the day's butter. It takes 2,041 hens to supply the eggs used each day, while a large truck-load of bread is the weekly ration. Two hundred and twenty steers are slaughtered to furnish a year's supply of beef. It uses 4,250 sheets, 63x99 inches, each week. The week's wash of sheets would stretch out on a clothes line for six and two-thirds miles, while a year's wash would reach from Chicago to Toledo, Ohio.

Not only may facts be thus visualized in words. The bulk amounts may be photographed in this form and used with telling effect.

The question frequently arises in the minds of those unfamiliar with publicity methods and values, "Does the editor of a newspaper want information concerning the tasks which hospitals are doing?" And it is a natural question to ask. The following quotations from an article in "The Mirror," a department on the stage and stage people, conducted by Charles Pike Sawyer daily in the *Evening Post*, New York City, indicates the attitude of all men charged with a special phase of the newspaper's output. The paragraph reads:

" 'Don't these theatrical press agents annoy you?' said a confrere the other day when the Mirror said he had seen eighteen that day. And the answer was prompt: 'Not a bit of it. Every one but two gave me information really wanted, and the two were ready to do it and didn't know offhand, but they sent it in next day.' It has been fashionable to poke fun at press agents, but they are on the job all the time and are always ready to furnish information."

Mr. Sawyer's comment brings out strongly the fact that had not these matters referred to been brought to his attention, he would not have had definite information concerning them. Hence, he would have failed to bring a message concerning them to the readers of his paper, or else would have been obliged to write without the facts, which would mean great possibility of errors.

There are those who take delight in berating the daily press. Yet these same men are delighted when some paper gives space to them. The newspaper fraternity knows this. For there is no group of people to whom seekers of personal publicity reveal their weakness in such raw fashion as to the brethren of the stub-pointed pencil and impossible writing paper. And there is no other group who has to be shown, Missouri fashion, as this same group. But once shown they fairly eat up the material that you have to give them.

It still remains for some one to sing the praise of the newspaper men and women of the country. To them would I lift my voice in praise, a host of fellow citizens, journeying with me along the highway to the Endless Years, and working without stint the while to tell the story of their fellows, while they trudge on unsung.

DR. ARTHUR B. ANCKER PASSES AWAY

Just as we go to press word comes of the death, at 3:30 P. M. Tuesday May 15 of Dr. Arthur B. Ancker who during the past forty years has been superintendent of the St. Paul City and County Hospital, St. Paul, Minnesota. Dr. Ancker had not been in good health for some time, but he continued to carry on his duties at the hospital unremittingly. Death occurred in the midst of his afternoon's work.

Dr. Ancker was seventy-two years old and on August first would have completed his fortieth year as superintendent of the hospital. A biographical sketch and an appreciation of Dr. Ancker and his work will be published in the July issue.

HOSPITALS OF OHIO, PAST AND PRESENT, WITH RECOMMENDATIONS FOR THE FUTURE*

By R. A. BRINTNALL, M.D., Former Chief, Bureau of Hospitals, Ohio State Department of Health, Columbus.

IN COMPILING the report on the Ohio hospital situation for 1921 an attempt has been made to give all information that could be gathered from all available data on hand.

As to giving the true distribution and service of all hospitals of any importance within the state, it cannot be far amiss, as the data regarding location and number of beds in the 288 registered hospitals are accurate, while the remaining twenty-two recorded as hospitals, but whose status is not definitely known, are homes for incurables, aged, etc., and include a few small private hospitals, whose estimated bed capacity cannot exceed thirty beds. This, it would seem, should give a very definite idea of the situation.

Data regarding various costs, revenue from full-pay, part-pay and free patients, total treatment days, average day cost, kinds of service undertaken, etc., can be given only from those hospitals reporting in full. This, however, includes all hospitals of importance. It is hoped that within a short time accurate data of this kind may be available from all Ohio hospitals, large and small. However, at the present time the system of records and accounting in a number of smaller hospitals is inadequate for such information and could not be given regardless of the willingness of these institutions to do so.

Facilities Must be Based on Demand

Adequate hospitals and hospital beds in any state or community can be based on one thing only and that is the demand made upon them by those needing such care. Various estimates have been made from time to time as to what these demands would be, but can an estimate be properly made on a city or rural population without taking many things into consideration? In estimating the bed capacity for a large city, how would one ascertain the average number from rural communities, the distance from which they came, and the whole area represented? Certainly a survey held in these hospitals at various days throughout the year would not give it with any degree of accuracy, nor give more than an idea of what population the estimate should be based upon. Likewise in a truly rural community the estimate could be based only on kind of service given by a hospital located therein and a true estimate of beds per 1,000 per true hospital service could not be derived.

Ohio for the year 1921 had 2.06 beds for every 1,000 people, and used of this number an average of 65 per cent for the state as a whole; while the larger cities, such as Cleveland, Cincinnati and Columbus with an average bed capacity (county basis) of 3.8 per 1,000, used 73 per cent. It would seem from this that the situation in Ohio today (taking the state as a whole) is not acute. If every person in the state who should go to a hospital, could go, it would be vastly different; but there are many things to be considered in this regard in making hospital bed estimates.

Supposing that the cost of equipping and maintaining a hospital bed for one year to be $500 (a very low estimate) and also considering the fact that during 1921, using but 65 per cent of the present bed capacity, hospitals of the state operated at a deficit of over $3,000,000, what would the result have been with eight beds per 1,000, the number usually recommended by experts? Nothing short of a calamity, and as the money for taking care of hospital operating loss is obtained from community chests, private donations, etc., great care must be taken to administer that trust properly in order that the public with a full sense of assurance will always meet the real emergency. Hospital bed estimates cannot be made for a state as a whole. The problems are as yet essentially local and practical, not general or theoretical, and the appropriate solutions must be sought accordingly.

Home Treatment Still Large Factor

As stated previously, if every case needing hospital care could go to a hospital, it would make a vast difference in the number of beds needed. However, until many of the present obstacles can be eliminated, it is safe to assume that hospital usage in the state will remain as at present, increasing only in proportion to its population. Things that influence and prevent proper use of hospital facilities are many and can be discussed but briefly here; in so doing we need not only to understand what hospitals do for their patients but their relation to the average individual of the community, and what factors decide his attitude toward their use.

A large proportion of illness is cared for and should continue to be cared for in the home, as the

*Part II of Dr. Brintnall's review of Ohio hospitals, the first installment of which was published in the April issue.

problems incident thereto, economic and otherwise, at times threaten its very existence. In time of accident or illness choice must be made as to procedure, and this among the resources at command. These may range from first aid in the home, the drug store, the quack, or advice of a friend, to the nurse, the private physician, or the hospital, and the final decision must be based on circumstances as manifold as human nature itself. Here enter the attitude of different sections of people, the medical profession, the well-to-do, the poor, the foreign born, the influence of cults, religious beliefs, and the fear and misunderstanding regarding institutions of this kind.

The industrial depression of 1921 had its full effect on Ohio hospitals both as to revenue and number of patients treated, and cost will and always must be a matter to be considered both in obtaining proper usage of hospital facilities and in the obtaining of needed public support. Hospital cost has been increasing with great rapidity, not alone from higher prices, but because of the advances in medical science necessitating more elaborate equipment and higher standards of service. However, public comprehension of better standards and service has lagged behind greatly. The problem of interpreting hospital service to the community has been difficult and, in order to gain confidence and adequate hospital usage, some means must be found of stating facts, and stating them in a way that will be easily understood by the average person. Such instruction not only gives the needed information but forms the basis on which taxes for municipal institutions must be levied and campaigns for community chests and private donations successfully accomplished.

High grade health services are available for both rich and poor, but provisions are inadequate for bringing the best which modern medical knowledge affords to those of moderate means, who in reality constitute the main element of our national life and strength.

Hospital cost to the individual has many angles. The number of people who remain away from hospitals because they cannot pay will never be known. What number will not accept charity or pay on part-pay basis? What should be the income of a family of five to be able to afford hospital treatment for one member of the family at the present time? The question is growing more and more serious. The National Bureau of Economic Research gives $595 as the average per capita income for 1918; after deducting allowance for inflation, the average per capita income is reduced to $376. This then gives a family of five a real income of $1,880. Again, consider that 88 per cent of the persons employed receive incomes of this amount or less. Compare this with $2,025.56, the rock bottom minimum of the U. S. Bureau of Labor for 1919. No fixed rule has been adopted by hospitals in regard to the ability of a patient to pay. The one commonly used is to allow $5.00 per week for each member of the family. If the total earnings exceed this amount, the patient is required to pay.

TABLE NO. 1.—HOSPITAL BEDS, OHIO REGISTRATION 1921.

Public	Number	Beds
Federal	3	132
State	13	17,227
District	4	172
County	10	787
Municipal	17	2,663
Private		
General	161	9,813
Special	80	1,883
Total	288	32,677

TABLE NO. 2.—REGISTERED HOSPITALS ACCORDING TO BED CAPACITY

Class	Size	Number	Beds
A	500 and over	13	18,680
B	200 to 499	17	4,257
C	100 to 199	29	3,791
D	75 to 99	11	994
E	50 to 74	32	1,726
F	30 to 49	37	1,292
G	15 to 29	64	1,291
H	5 to 14	59	570
I	1 to 4	26	76

Average Patient Day Cost $4.87

Of the 117 major hospitals in Ohio reporting in full regarding patient status, etc., the average day cost was $4.87, this ranging from nearly $9.00 per day in some of the smaller institutions to two dollars and a few cents in others. As a class the patient day rate ran highest in institutions from 100 to 200 beds, averaging $5.29, while the lowest was in Class A hospitals of 500 beds or over, at an average of $3.73 per day. (Class A includes only Cincinnati General and Cleveland City hospitals, both municipally owned.) All classes with the exception of Class A ran above the average cost of $4.87 per day. The total beds for this number of hospitals was 9,454 or 80 per cent of all acute hospital beds in the state, caring for 183,684 patients during the year. Of this number 101,332 or 55 per cent were full pay, 45,961 or 25 per cent part pay and 36,391 or 20 per cent free. The total number of days' treatment given is 2,233,363, and with a total of 183,684 patients treated would give the average number of days treatment per patient as 12.2. This number of beds would offer a possible 3,356,670 days treatment per year, whereas the actual number of days treatment reported was 2,233,363, or 66 per cent of the total. The fact that 34 per cent of the total bed capacity was unused might sig-

nify over-hospitalization; however, emergencies, seasonal and annual variations in the volume of sickness, make it necessary that this apparent surplus in bed capacity be in readiness at all times. Still, the fact remains that certain communities have provided more hospitals and hospital beds than can be advantageously used. This would suggest not only the need of public education but public supervision as well, in order to prevent in the future conditions of this kind.

Table No. 3.—Status of Hospital Registration, Ohio, Dec. 31, 1921

	No. of Hospitals in State	Number of Beds	Per-cent.
On active list	310	32,875	100 0
Registered with State Dept. of Health	288	32,677	99.4
Not registered	22	198	0.6

The total cost of 2,233,363 days' treatment is given as $11,027,460.72 or an average of $4.87 per patient day. The total revenue from patients is given as $7,999,605.71 making a deficit during the year of $3,027,855.01 which would make a per capita deficit of 51 cents for the entire state.

State Death Rate is Low

In Table No. 7 the death rate per 1,000 per hospital population is shown as against the state rate for the year. This report is based on records from 131 general hospitals, giving sufficient data, the total number treated being 195,739 with 8,947 deaths or a death rate of 21.8. This when compared with the state rate of 11.4 (the lowest since the establishment of the bureau of vital statistics), is remarkable when the condition of the average hospital patient is considered.

The different services rendered by general hospitals are given in detail in Table No. 8.

Using 117 of the largest general hospitals as a basis, the per patient day cost for various services has been estimated as follows:

X-ray	0.10
Administration	0.53
Laundry	0.21
Housekeeping	0.56
Food	1.05
Total	$2.45

This can be taken only as a general estimate, as various institutions differ in their method of accounting; heat, light and power and nursing are not included.

The question of the closed staff is another thing to be considered in hospital population. When one stops to consider that in large cities about 50 per cent of the physicians control all hospital beds (Cleveland Survey shows 25 per cent physicians control 80 per cent of beds), it is only natural to inquire what is done with the patients of the remaining 50 per cent. It is natural to suppose that a physician who must turn his patient over to another in order to get hospital treatment will keep that patient out of the hospital as long as possible, thus defeating those whom he supposes are trying to "put one over" on him, and in order to accomplish his purpose sometimes giving out a great deal of misinformation to the family. Coming from a physician, this is really believed and broadcasted, resulting in a great deal of harm.

Medical education, as well as nursing education, has been and still is largely a training in handling problems essentially individual. Specialization surely is necessary for teaching, advancement of knowledge and proper division of labor, but given undue emphasis at the expense of a properly proportioned program and equally distributed service to patients and community it may lead to things of great danger and leave uncovered a large field of essential activities, this field being rapidly filled in by quacks and pseudo-scientific groups and resulting in a great deal of bewilderment to the public mind. As a result private organizations have tried to meet this need with clinics, health center, dispensaries, etc., many times ill adapted to the practical need of the community and resulting in the serving of special groups, duplication and neutralization of effort, excessive total costs and a false sense of accomplishment.

Apparently there is much need for coordination of these various groups toward well defined objectives. The common ground upon which the patient, the community and professional groups should meet is the hospital. It occupies a strategic position, with unlimited opportunities and with an obligation far more reaching than professional services rendered to individuals. The discussion, however, of its ability as coordinator of activities, professional, economic and social, cannot be considered here.

Need of Public Supervision

Before making recommendations for legislation covering the supervision of private hospitals, the need of such legislation should be determined. It should also be determined whether such an undertaking would be of practical application, and whether such recommendations could be put into effect.

It is conceivable that all who have administered to the hospital needs of the commonwealth have maintained hospital service at a high level. Again it might be assumed that public supervision of

hospitals is a practical impossibility. In the first case, public supervision would be unnecessary; in the second, positively detrimental; and in either case it could not be consistently recommended. As to the first question there has not yet been devised a formula that will express hospital efficiency in a single factor, but assuming that such figures were available, they would show that there exists in Ohio at the present time a wide range of hospital procedure. While it cannot be stated that the greatest number of beds incline toward this class, it is true that a large number of hospitals are relatively inefficient. As to the ability to enforce hospital supervision, the good that has been done through the hospital councils of large cities in coordinating the work of their institutions would indicate that this could be as easily done for the state as a whole.

Ohio had for 1921 an average of 2.06 beds for each 100 of population, 65 per cent of which were in use, but this does not mean that hospitals are equally distributed, and that the situation while not acute in one locality may not be so in another. It does not necessarily mean that a community, having no hospital facilities whatever, is not awake to its public duty in hospitalization, but that mere inability on its part to give true hospital service has been the drawback. When a community awakes to the fact that it has, or thinks that it has, inadequate hospital facilities, the awakening is not due always to pure reasoning and public spirit, but is usually the end result of a bad industrial accident or calamity of some kind. It is evident from a study of the Ohio hospital situation that the larger percentage of hospitals of the state were planted and not planned. Each has grown without any relation to the other. In certain municipalities claiming to have a shortage in hospital beds, it will be discovered that the

TABLE NO. 4.—ALL REGISTERED HOSPITALS AND HOSPITAL BEDS, OHIO, DEC. 31, 1921*

According to private or public administration.

	Number of Hospitals	Number of Beds	Per-cent.
Public	47	20,921	62.1
Private	241	11,756	37.9
Total	288	32,677	100.0

*This includes all hospitals in the state, insane, maternity, special, etc.

situation is not acute in the community as a whole but acute for one hospital only, and for that reason the hue and cry are raised without adequate investigation.

Buildings Often Monuments to Donors

Until recently, and even now, construction of a hospital is a matter of accident arising from different crises. When a decision to build a hospital is reached, the public, entirely innocent of any knowledge of the necessities in the case, provides the funds. The architect is chosen as a rule, not because he has made a special study of hospital

TABLE NO. 5.—ACUTE HOSPITALS AND HOSPITAL BEDS, AVAILABLE FOR PUBLIC USE, OHIO, DEC. 31, 1921

	PRIVATE		PUBLIC	
	Number of Hospitals	Number of Beds	Number of Hospitals	Number of Beds
General	18	2,375	161	9,813
Special	3	90	80	1,883

construction, but because he would charge less for his services than someone else, or because more of his friends are connected with the management than any of his colleagues. If he has specialized in the building of elevators, hotels or sawmills the hospital will naturally contain some of the characteristics of those structures.

The main facts usually overlooked in community construction of a hospital are: that the institution supply the greatest amount of hospital care of the best quality to the greatest number of patients at the smallest possible expense; that there are sufficient means provided for the maintenance of a hospital; and that it be planned so that expansion of the institution may be made in accordance with the public demand.

There is a marked tendency on the part of those chosen by the people to erect a hospital to build a monument to themselves as well as an institution to care for the sick and injured. Institutions have been constructed so that in one case the amount expended per bed may be as high as $10,000, while another institution, capable of giving the patient the same degree of safety and the same quality of hospital care, will have cost not exceeding $2,000 to $3,000 per bed. The logical conclusion from these figures would necessarily be that useless extravagance must result in an impossibility to provide a proper number of hospital beds, or as has happened in a number of instances, after the completion of the structure, there will be no funds for the maintenance of the institution. The difference that could be made in costs in some institutions, if placed at interest, would nearly support and maintain it.

It is quite as important to build an institution with a view to economy in its maintenance, after it has been constructed, as it is to insure economy in the construction itself, because there is a wide difference between the expense of conducting an institution which is conveniently planned and one planned without regard to the convenience of its management. It is a well-known fact that no

amount of capital could be safely invested in any enterprise at the present time, in competition with other similar enterprises, unless it were well established, built up and conducted by those familiar

TABLE NO. 6.—ACUTE HOSPITALS AND HOSPITAL BEDS, OHIO, DEC. 31, 1921

Total Population	Total Acute Hospital Beds	Total Patients Treated in Year	Average No. Patients Daily	Per Cent Bed Capacity Used	Beds Per 1,000 Population
5,912,657	12,188	233,894	7,955	65.0	2.06

Total acute hospital beds for state. Total patients treated during year. Average number of patients per day. Average bed capacity used and beds per 1,000 population for state.

with this particular kind of work. This principle is constantly being observed, and the willingness of philanthropic persons to place their wealth in the hands of those incompetent in this work has, and always will, lead to disaster.

Must See Hospital as Public Utility

It would seem that to appreciate thoroughly the public character of a hospital, it should be regarded in the light of a public utility, as it possesses all of the characteristics. The need filled by the commonly recognized public utility sometimes only remotely affects public health and safety, but the need of supervision has not been overlooked and existing laws recognize the propriety of subjecting them to public supervision. The hospital is essentially a public utility filling a positive public need. The difference in efficient and inefficient performance is the difference between life and death. Its sole function is protection of public health.

In the matter of records, which is usually a criterion of efficiency of an institution, hospitals in the state vary from those which keep no record whatever of patients' or hospital performance to those which keep complete records in every detail. In considering personnel, hospital service is rendered in Ohio today by individuals and organizations ranging from illiterate and thoroughly incapable individuals to well organized groups of leaders administering hospital service in perfect harmony with the highest type of medical service available. The number of hospitals in the state today without proper facilities for hospital performance and hospital diagnosis is appalling. These facts are well known to anyone having the slightest knowledge of the hospital situation and become immediately apparent with very little study. The very lack of any semblance of uniformity in organization and methods is strongly suggestive of widespread inefficiency.

The number of hospitals of all sizes maintaining a high standard is sufficient to demonstrate the practical possibility of efficient hospital performance. Failure of legislation to require observance of certain standards is largely responsible for the situation as it exists today.

Considering the hospital situation from all angles from its beginning, up and through the services rendered, it would seem that a centralized state department capable of giving advice in matters of construction and necessity of building would be of the greatest protection to public welfare; this department should be authorized by legislative act to regulate hospital performance by specifying minimum standards and promulgating regulations to be enforced through a plan of licensure. For the sake of public economy in establishing the need of additional hospital facilities in any given community it would be advisable that the necessary technical questions involved be approved by the state department of health before allowing the incorporation of any hospitals. It is recommended:

I. That authority be given the state department of health to regulate hospital performance by specifying minimum standards and promulgating regulations to be enforced by a plan of licensure.

II. That approval by the state department of health be required in the incorporation of any new hospital within the state.

Present Duties of Hospital Bureau

Owing to the large number of bills constantly being presented to the general assembly making various provisions for the care of the sick, a committee was in 1918 appointed by the governor of the state to study the laws and statistics relating to the healing arts with the view of presenting to the next general assembly necessary data not then available as a basis of action. As related to hospitals this committee was charged specifically with making a survey of "the present system of laws relating to the incorporation, licensing, inspection, supervision and registration of public and private hospitals."

As a result of the work of this committee the following recommendations were made in a report January 4, 1919:

TABLE NO. 7.—DEATH RATE IN HOSPITALS COMPARED WITH ALL DEATHS IN STATE

Total general hospitals giving proper data	Total beds	Total No. treated in year	Total hospital deaths	Hospital deaths per 1,000	All deaths in state per 1,000
131	10,555	195,739	8,047	21.8	11.4

I. That the commissioner of health be empowered to define and classify hospitals and dispensaries and that all hospitals and dispensaries be required to register with and report annually to the state department of health.

II. That the state department of health be instructed to

"make a * * * study of the present hospital and dispensary facilities of the state and make recommendations for such legislative action as is necessary to bring about a closer working relation between * * * private hospitals and dispensaries and the state * * * *."

III. That a bureau of hospitals be established in the state department of health to discharge the provisions of the foregoing recommendations.

Hospital and Dispensary Defined

The first recommendation was incorporated in the Kryder bill which was passed by the 83rd general assembly in 1919 and became a law. Recommendation II was incorporated in the Talley Resolution which was adopted by the same assembly and a bureau of hospitals was established in the state department of health by the public health council following a favorable action of the assembly on the first two recommendations.

October 31, 1921, the following definition and classification of hospitals and dispensaries was adopted:

Any institution or establishment, public or private, for the reception and care of persons for a continuous period longer than twenty-four hours, for the purpose of giving advice, diagnosis or treatment bearing upon the physical or mental health of such persons, shall be considered a *hospital.*

Any institution or establishment, public or private, for the purpose of giving advice, diagnosis or treatment bearing upon the physical or mental health of an individual shall be considered a *dispensary;* provided that a hospital and the quarters of a licensed practitioner of medicine used for his private practice shall not be deemed to come within the meaning of this definition.

The work then, in part, of the hospital bureau is the compilation of the annual registrations and reports of all public and private hospitals, required by law, in order that sufficient accurate data may be available at all times as a basis for intelligent future legislation.

Table No. 8.—Giving Type of Service Rendered in Acute Hospitals of the State

*Number of general hospitals reporting, 146. Giving following service.	
Major surgery	139
Minor surgery	140
General medical	133
Maternity	124
Contagious	9
Venereal	41
Genito-Urinary	90
Tuberculosis	14
Pediatric	86
Insane	5
Mentally Nervous	34
Epileptic	9
Dermatological	52
Orthopedic	89
Gynecological	108
Rhinolaryngological	89
Ocular	74
Dental	44

*This report includes only general hospitals, federal, state and special hospitals are not included.

Laboratory service done.	
Clinical Blood	110
Clinical Urine	120
Bacteriological	102
Surgical Pathology	82
Wassermann	81
Equipped With X-ray	
For Diagnosis	107
For Treatment	63
Conducting Dispensary	24
Doing Out-patient or Social Service Work	28
Operating own ambulance service	4
Intern Training	31
*Nurses Training school.	69
Having definitely organized staff	80
Having registered pharmacist	29
Central filing of patients records	99

*Only hospitals of a bed capacity of 30 or more considered for nurses' training schools—all recognized schools.

The annual registration form required from all hospitals, in brief, requests the following information: Name and ownership; location; incorporated for profit or otherwise; names of officers and superintendent; a list of the services rendered by each hospital, i. e. surgical, medical, maternity, mental, etc.; what amount of laboratory work is done and how; x-ray equipment; dispensary, social service work, intern training and nurses' training school; kind of records and how filed; methods of admission; provision or pre-operative diagnoses; definitely organized staff; number of private rooms, two-bed rooms, ward; total bed capacity.

The annual report form required from all hospitals, in brief, requests the following: total patients admitted and treated during the year; total deaths; number autopsies performed and maximum daily census; admissions classified into male and female, general medical, surgical, maternity, contagious, tuberculous, etc.; patients classified in pay, part-pay and free with total number of patient days; operating cost divided into (1) administration, (2) plant maintenance, (3) professional care of patients, (4) dietary and (5) social service, the total operating cost divided by the total number of treatment days, giving the per patient day cost. This cost is now certified by the state department of health to the industrial commission and is used by it as a basis for the industrial contracts with each hospital.

There are in the state 288 registered hospitals of all kinds, 179 of these with a total bed capacity of 12,188 for general use. The average number of patients in hospitals each day for the year 1921 was 7,955, a population equal to a city the size of Wooster, Wellsville or Galion.

Another part of the work of the bureau of hospitals is the licensing of hospitals doing maternity work. For a number of years the state department of health had licensed certain institutions engaged in maternity work, but limited this activity to those doing maternity work exclusively. The 83rd general assembly in 1919 repealed the definition and empowered the commissioner of health to define and classify hospitals. For the purpose of administering the maternity hospital law the following definition was given:

"Any place into which women are received to be cared for before, during or while recovering from parturition, shall be considered as a maternity hospital."

This definition was construed to include: (a) maternity hospitals operated exclusively for maternity cases; (b) a department, ward or section of a general or other hospital set apart or used for maternity cases; (c) a private home or other place making a business of receiving maternity cases, including institutions commonly known

TABLE NO. 9.—HOSPITALS, HOSPITAL BEDS, PATIENT DAY TREATMENT AND COST.

Hospital Class No.	Beds	PATIENTS Full Pay	Part Pay	Free	Total	Days Treatment	Revenue from Patients	Total Operating Cost	Average Cost per Day
A 2	1,330	3,331	197	15,390	18,918	345,638	$ 212,848.82	$ 1,288,918.00	$3.73
B 12	2,901	30,952	18,117	11,555	60,624	761,275	3,223,161.80	3,972,759.55	5.22
C 17	2,238	22,367	14,611	6,614	43,592	503,339	2,029,105.41	2,665,149.97	5.29
D 10	833	10,459	8,048	1,756	20,263	196,736	792,049.41	966,037.01	4.91
E 12	688	9,456	1,901	333	11,689	126,512	495,627.01	642,637.55	5.08
F 19	692	10,181	2,721	383	13,285	144,328	577,199.87	718,001.50	4.97
G 30	606	12,276	320	324	12,920	129,880	545,647.87	648,993.19	5.00
H 14	163	2,251	45	35	2,331	25,360	122,555.52	123,548.95	4.87
I 1	8	60	1	1	62	295	1,410.00	1,414.00	4.80
	9,454	101,332	45,961	36,391	183,684	2,233,363	$7,999,605.71	$11,027,460.72	$4.87

*This report was compiled from data received from 117 general hospitals who reported in full, and contains all hospitals of importance in the state. Federal and state hospitals are not included.

as maternity or lying-in hospitals and homes. The effect of this definition is that all institutions admitting maternity cases are now required to secure a license from the state department of health in order legally to engage in maternity work.

Maternity hospital licenses may be obtained on application to the state department of health and will be granted when inspection by an agent of that department qualifies the institution for license. Application will be recognized only when the institution is first registered under the hospital law, and when the application is duly approved and signed by the local board of health, licenses are granted for the term of one calendar year.

Maternity Hospital Regulations

In the licensing of maternity hospitals some of the outstanding regulations are:

(1) There must be a limitation of the number of patients to conform to size of institution as regards comfort and safety.

(2) All rooms and wards must be outside rooms, with adequate lighting, and must be sanitary and properly heated.

(3) Separate delivery room must be used for no other purpose when institution has capacity of five beds or more; a nursery must be provided unless each mother is in private room.

(4) An efficient prophylactic solution shall be used in the eyes of each new born child; a legally qualified physician shall be present and in attendance at time of birth.

(5) All artificial feeding must be done under the direction of physician. Equipment must be provided for proper sterilization of bottles, stoppers, nipples, etc.

(6) Each maternity hospital shall employ at least one registered nurse.

(7) Proper reports must be kept and recorded.

(8) No child shall be given out for adoption except by and with the consent of a charitable organization, society or institution, having the care of children under its control and duly incorporated under the laws of the State, or of a juvenile court.

In regard to dispensaries, the work of the bureau is in gathering data that will be of value and available for forming future plans and needed legislation. This has been difficult owing to their large number and diversified interests. With the development of many forms of specialized work and its public health application by means of dispensaries, nurses and other sociologic methods there has come, and will progressively come, the problem of organizing these specialties and using them in correlation. It is not possible to continue the development of dispensaries and clinics with the necessary machinery for tuberculosis, for contagion, for babies, for school children, for mental diseases, for venereal diseases and other problems in separate and independent organizations. Failure will necessarily come from the weight of the machinery alone. Data must be available to assist in the proper coordination at the time needed.

COLLAPSE OF RECONSTRUCTION HOSPITAL THREATENED BY SEWER BREAK

The sixty patients in the Reconstruction Hospital, New York, were taken in a dozen ambulances to other hospitals at 9 o'clock on the evening of March 16 when the collapse of the five-story structure was threatened by a burst main sewer, which flooded the excavation for the hospital's eleven-story annex, on the southwest corner of West 100th Street and Central Park West.

None of the patients was in a serious condition, as the hospital is devoted to the reclamation of persons maimed in industrial accidents. Their removal was achieved easily after it had been decided upon. Superintendent Robert Stuart notified the superintendents of Roosevelt, Knickerbocker, St. Luke's and other hospitals to send ambulances, and the transfer of the patients, forty-nine men, three children and eight women was made immediately, allotments being made according to the facilities and capacities of the receiving hospitals. Later all the patients and the entire staff of the hospital were transferred to Polyclinic Hospital, Fiftieth Street, near Ninth Avenue.

The sewer break, which extended forty feet over a pipe four feet in diameter, had been flooding the deep excavation for at least half an hour before it was discovered.

The enforced evacuation of the hospital enabled the institution to be thoroughly renovated. The discomfort incident to a general overhauling was thus avoided.

The MODERN HOSPITAL

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A NURSING SCHOOL OF THE NEW ORDER

THE plan of Yale University for its new school of nursing, announcement of which has recently been made, includes several new features and an attempt to embrace in a single program the best thought and current tendencies in nursing education. There is general agreement among public health, hospital and medical authorities that the need for nurses is probably one of the most pressing problems in the health program of the present day and there is open to this new school an opportunity to make an important contribution to this program for the entire country.

The school of nursing is to be conducted in accordance with an educational plan and to accomplish this the school will be organized with a dean, governing board, faculty, laboratories, classrooms and a budget of its own. At the present time training schools in the great majority of instances are conducted on the apprenticeship basis, a method now abandoned in practically all professional fields. This method, subject as it is to the labor demands and exigencies of hospital needs, no longer provides satisfactory preparation for the profession of nursing. The Yale proposal does not aim to provide only theoretical instruction but looks toward the development of an educational program closely related to and dependent upon the practical work. It is clear that the very essence of nursing is the art of attending the sick and any sound plan of training must be based on an endeavor to promote the efficiency of that art.

The second feature of the Yale school follows naturally from the re-planning of nurses' training, for by focusing attention upon the educational training of the student and by eliminating many routine tasks which contribute little or nothing to this training, it is clear that the period of preparation for nursing can be shortened. Recent studies of nursing education suggest that under such a plan the period of training can be shortened to approximately twenty-eight months. Provisions will be made for an elective pre-nursing period of university work in addition to the nursing course proper, which latter will embrace a schedule of instruction previous to and paralleling the supervised training in the theory and practice of nursing. The schedule will be somewhat elastic in order to permit young women of different preliminary training to develop in keeping with their individual aptitudes and ability.

The most significant feature of the Yale school, however, is the character of the training itself. An attempt will be made to present all the factors

which contribute toward the diagnosis, care and treatment of disease and which have relationship to the conservation of health. Patients will not be considered as hospital cases only, but such factors as heredity, environment, child development, psychology, economics, sociology, industry and public health will be presented in their bearing upon each problem as it is studied. Such a plan will emphasize sickness in its true relationship as a family, community and public health problem, and to develop such a conception properly the new school will embrace field work and community nursing as a part of the basic training. This attitude will be emphasized throughout the entire period and a considerable portion of the course will be devoted to these features.

The general plan of the school of nursing should provide in this basic course a well-rounded preparation which will permit graduates to enter directly into community, hospital or private-duty nursing or to proceed into one of the various special branches of nursing, opportunities for which will ultimately be developed as a part of the Yale program. Whether the graduate of this school intends to go into administrative nursing, nursing education, school or industrial nursing, the nursing of contagious diseases, tuberculosis, or mental diseases, she will have an understanding of the community as well as the bedside aspects of nursing and she will have a knowledge of the factors which contribute to sickness, the control of which makes possible the prevention of disease.

The plan includes a coordination of the educational work of the New Haven Visiting Nurse Association, one of the best community nursing organizations in the country, and of the Connecticut training school for nurses in the New Haven Hospital. With a community of optional size for public health work, embracing as it does a large university center, a medical school with a full-time faculty, a highly developed community nursing program, and hospital and out-patient facilities under one administration, it is hoped that this new school will be able to make a fundamental contribution to the nursing education of the country.

TRENDS IN DISPENSARY PRACTICE

DR. C. H. GODDARD'S paper in this issue illustrates the growing interest in dispensary matters which has led one of the leading institutions of the country to have its representative survey current practice in a number of other important institutions; and at the same time it exemplifies the prevailing lack of definite and tested standards of out-patient policy and procedure. Superintendents generally will be interested in the facts presented by Dr. Goddard of the dispensary methods at nine institutions, affecting many points of organization and administrative method. Dr. Goddard's paper, being too long for a single issue, will appear in installments in three successive issues.

The reading of such a paper as this may help to relieve that state of mind, too prevalent among institutional administrators, of seeing only what is going on within one's own four walls. Committee meetings or conferences of administrators are all too frequently characterized by testimony from each as to the methods pursued by each, but there is generally all too little in the way of analysis of the necessarily varying details of method into their common elements and underlying principles.

The corrective for this institutional psychology is partly to be found in comparative studies or surveys of differing institutions. In the dispensary field interest is increasing so rapidly that a good deal of such comparative material may be expected to appear in the near future. What are still more needed are definite and systematically planned studies of methods; organized research into the administrative problems of hospitals and dispensaries. Such researches must be conducted in one or more institutions as laboratories. Plans must be made and these plans tried out in their actual working under careful observation and impersonally applied tests. There is a vast field for such investigations in smaller hospitals and dispensaries, as well as in large ones, and it is much to be hoped that attention and funds will be turned in such directions.

COULD THIS OCCUR IN YOUR HOSPITAL?

"I MUST frankly admit," remarked a superintendent with whom we were recently discussing methods of purchasing, "that in making my selection of supplies I frequently do so blindly or act upon what may be the prejudiced judgment of an agent. I have fallen into the habit of specifying certain makes or brands, not because I know what are the best articles for my purpose from a critical analysis and comparison of products and a knowledge of how they are made, but because someone has told me they are the best."

We have wondered since how many other superintendents, if they were entirely frank, would make the same admission. In making a purchase of china, for example, how many superintendents could give a clear answer to the following questions: Does the china offered me have the dur-

ability which its use demands? Has it the sanitary qualities which hospital use requires? Is the method used in applying the decoration such as to give maximum wearing quality? Of what and how is china-ware made?

Or take sutures. Faced with the responsibility of placing an order for this exceedingly important item, how many superintendents first consult the bacteriologist and the surgeon of their institution as to the sterility, tensile strength and pliability of the sutures they have been using, as a guide to intelligent purchasing? Do they know whether or not bleaching decreases their tensile strength? Are they acquainted with the process of their manufacture?

Or yet again take knives and needles. In making their purchases of these commodities, how many superintendents know whether the products of one country are better than those of another; and, if better, wherein their superiority lies in the quality of the steel used or in their manufacture.

Need we multiply illustrations to bring home to those charged with purchasing responsibility the obligation under which they rest to purchase intelligently? Sources of information are on every hand—the hospital magazines and year books, government publications, illustrated catalogues, books on applied sciences, and, last but not least if used with discrimination, the well-informed salesman. Is it not evident that unless the hospital superintendent or purchasing agent keeps himself thoroughly informed about the things he is called upon to purchase he is in danger of placing himself at the mercy of unscrupulous dealers?

THE HOSPITAL IN THE COMMUNITY CHEST MOVEMENT

THERE is every reason to believe that the community organization movement which has had such a phenomenal development during the past fifteen or twenty years is here to stay and will go forward vigorously until its full objective is attained. The movement is known by a variety of names—community chests, financial federations, welfare federations, community councils and central councils of social agencies, but under whatever name it represents a healthful swing from individualism, often inefficient, and sometimes excessive, to wholesome cooperation.

As hospitals are one of the community's most important social agencies, they have rightful place in financial and welfare federations. Hence, the great importance which THE MODERN HOSPITAL attaches to the series of three articles on this subject which has appeared in the April, May and June issues, and of which Mr. Frank E. Chapman's on "The Community Chest—Its Advantages and Disadvantages" is the last.

Whatever untenable attitude of individualism hospitals may have taken in the past, they must henceforth take their place with the other social welfare agencies of the community, and through cooperative planning and work assist in eradicating the abuses of miscellaneous and unrelated social work, in establishing high standards of service and kindred activities.

Just how far hospitals are already participating in this community organization movement as it now exists in about 125 American cities we have no means of knowing, but some conception of the degree of this participation may be gained from the figures gathered by Mr. Chapman from the ten cities from which he sought information for the basis of his article. In three instances the hospitals do not participate in the financial federation of their community. In the remaining seven instances the approximate percentage of budget requirements of the hospitals provided for by the community chest runs from ten to twenty-seven per cent. In three instances only a limited number of hospitals participate.

Various arguments have been advanced against this scheme of control and finance by persons out of sympathy with it, but in our judgment these arguments have all been successfully refuted from time to time. Telling refutations to the principal objections that have been advanced may be found in an article which appeared in the March 15, 1923 issue of *The Survey*.

The movement is well grounded in sound economic principles and will increasingly become part and parcel of our social scheme. In communities which now support well organized community chests, hospitals will therefore, do well to apply for membership. In communities which have not as yet organized chests but where such a chest would be practicable and an asset to their social forces, the hospitals will perform a public service by taking an outstanding part in their organization.

MRS. ASA S. BACON PASSES AWAY

READERS of THE MODERN HOSPITAL will greatly regret to learn of the death of Mrs. Bacon, wife of Mr. Asa S. Bacon, superintendent of the Presbyterian Hospital of Chicago and president of the American Hospital Association.

Mrs. Bacon died on May 3, after a prolonged illness. In extending our sympathy to Mr. Bacon in his bereavement, we know we are expressing the sentiment of the entire hospital profession in the United States and Canada.

This design by Charles N. Crittenden, of Minneapolis, ranked high from the standpoint of simplicity and artistic appearance. But, for the size of the building, there are too many porches which are not well placed; and the interior, in some instances, needs to be more conveniently arranged.

A FEW MODIFICATIONS WOULD MAKE THIS A VERY PRACTICAL INTERIOR

THE plans for which prizes and honorable mentions were awarded in THE MODERN HOSPITAL'S architectural contest for the plans of a small thirty to forty bed hospital were published in the May issue. For their educational value some sixteen other plans submitted in the contest have been selected for publication in this and succeeding issues. It is felt that the educational value of a study of these plans is greatly enhanced when accompanied by comments both critical and commendatory and various experts in hospital planning have therefore been invited to criticise the plans anonymously. For assistance, in preparing the comments subjoined to the four plans in this issue, we are indebted to Mr. Meyer Sturm, architect, Chicago, to Dr. W. L. Babcock, superintendent, Grace Hospital, Detroit, and to Mr. Oliver H. Bartine, hospital consultant, New York.—EDITOR'S NOTE.

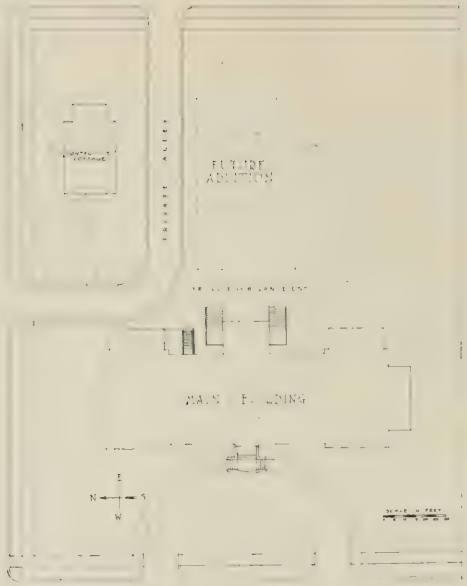
THE elevation and general appearance of this building is excellent and is to be commended from the standpoint of simplicity and artistic appearance. There are, however, far too many porches for a hospital of this size and those at the corners of the building are not well placed. Access to them must be either through a room or through valuable space that should be used for other purposes. In a number of instances these porches are more or less useless and involve the institution in needless expense of construction and maintenance.

The basement plan forces some of the help to pass through a dining room to get to their sleeping quarters. This is poor planning. We do not find that the help has been provided with any toilet facilities. While the kitchen stores should have direct connection with the kitchen, the cold storage rooms should not be entered directly from the kitchen. The dining rooms have been well located for economical operation. The kitchen might preferably have been located at one of the corners in order to get better natural ventilation. The central location of general stores is excellent, although the rooms are much too small for this purpose. The laundry has not been allowed sufficient floor space to take care of modern equipment. There is no necessity for having the superintendent's apartments open into the general office. The superintendent's quarters should preferably have been given a corner space. The visiting physician's consultation room should be provided with lockers and toilet facilities. The door leading from this room into the out-patient department should be eliminated. If the out-patient department and X-ray suite are to be located on this floor they should have a separate entrance, preferably in the rear. The X-ray suite, moreover, should be made somewhat larger. A quiet room next to the children's room opening on to the same porch is rather misnamed.

The nurses' stations could well have been more centrally located to afford better control of visitors at the elevator and stairway. There is no nursing room or sitting room on the second floor. Several private rooms are too narrow by a foot or a foot and a half.

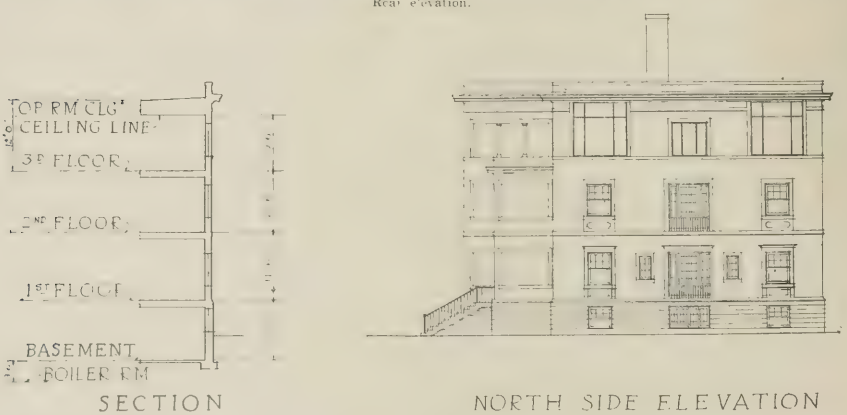
We are at a loss to know why the accident room is placed on the second floor. There appears to be no provision for a morgue or isolation room. The operation suite has been well planned, although the anesthetizing room is rather small. The nursery should occupy a corner room. A door in the corridor would keep sounds originating in the maternity and nursing departments from passing to other parts of the hospital.

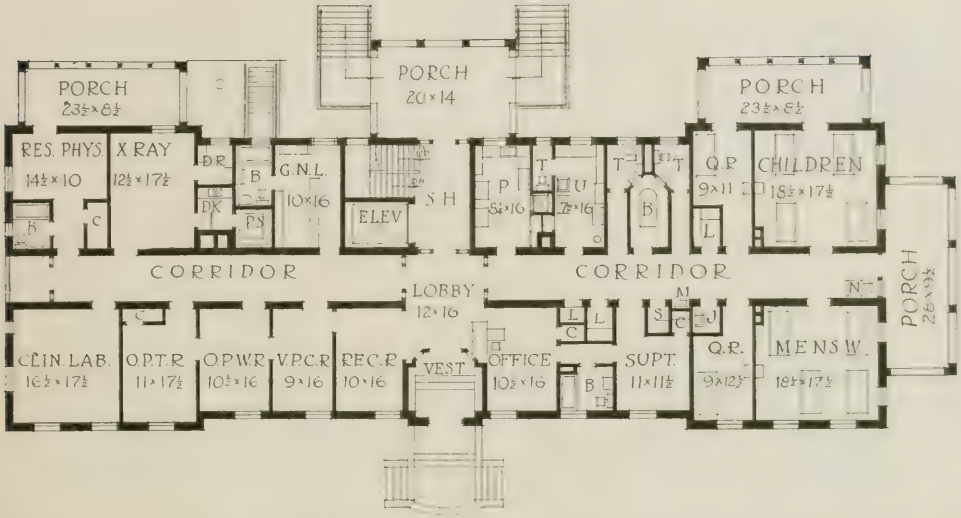
With the modifications suggested, this plan would undoubtedly be found serviceable and practical.



Plot plan.

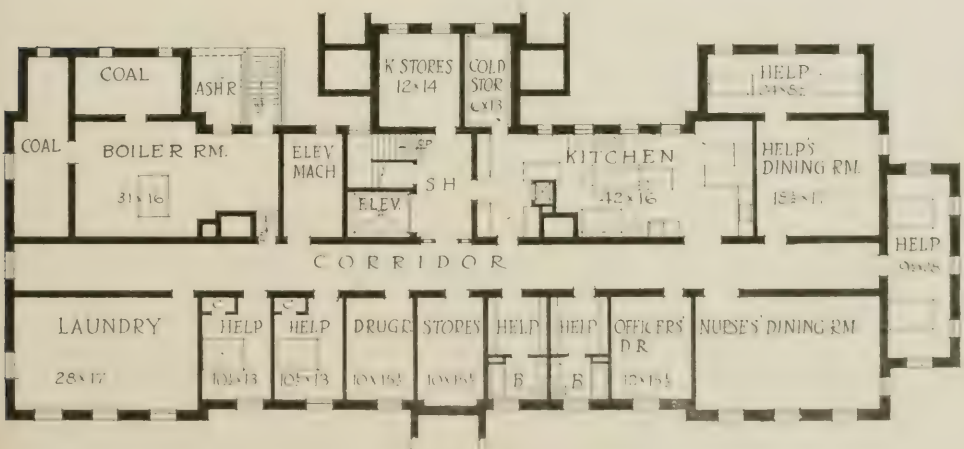
Rear elevation.





FIRST FLOOR PLAN

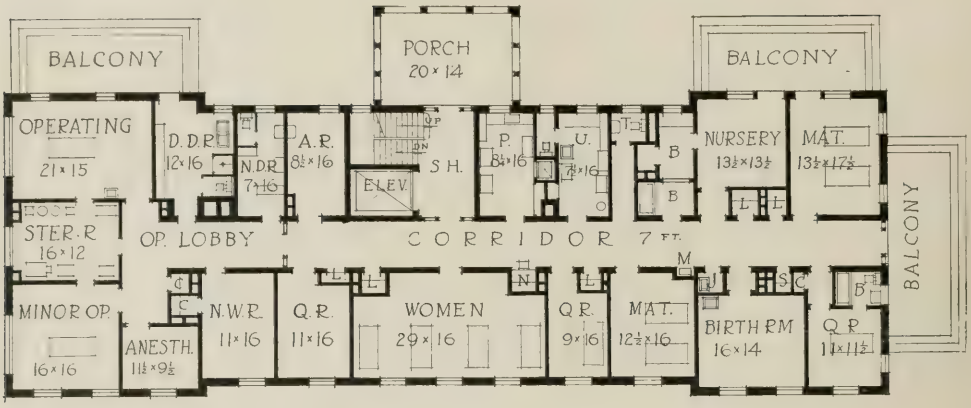
D.R.-DRESSING RM. DK.-DARK RM. P.S.-PLATE STORAGE Q.R. QUIET ROOM
G.N.L.-GRAD. NURSES' LOCKERS B-BATH T-TOILET P-PANTRY U-UTILITY ROOM
O.P.T.R.-OUT PATIENTS' TREATMENT RM REC.R.-RECEPTION RM. J JANITOR
O.P.W.R.-" " WAITING RM L-LINEN C-CLOS. S SUPPLY CLOS.
V.P.C.R.-VISITING PHYS. CONSULTATION RM. M-MED. CLOS. N CHARTING SPACE
S.H. SERVICE HALL



BASEMENT PLAN

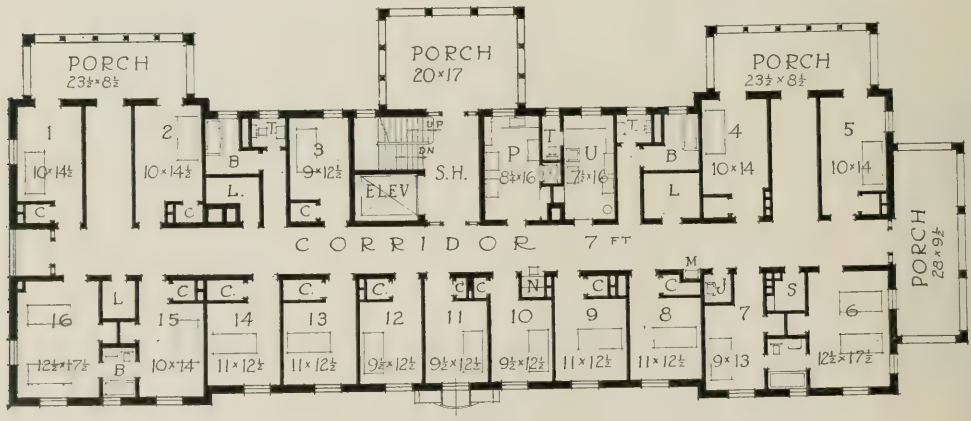
SCALE

N S W



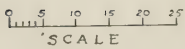
THIRD FLOOR PLAN

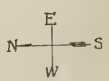
D. D. R.	DOCTORS DRESSING RM.	T - TOILET
N. D. R.	NURSES	B - BATH
N. W. R.	WORK RM.	M - MED CLOS
Q. R.	QUIET RM.	C - CLOS
MAT.	MATERNITY WARD	S - SUPPLY CLOS
A. R.	ACCIDENT ROOM	P PANTRY
N.	CHARTING SPACE	U - UTILITY RM.
S. H.	SERVICE HALL	J - JANITOR



SECOND FLOOR PLAN

NOS 1 TO 16 PRIVATE ROOMS P - PANTRY
B - BATH L - LINEN T - TOILET J - JANITOR
S - SUPPLY CLOS. C - CLOS. S.H. - SERVICE HALL
U - UTILITY R.M. M - MEDICINE CLOS.
N - CHARTING SPACE





The exterior of this structure designed by Royal Dana of New York City is excellent, although the building is too large to be constructed and operated economically. A smaller number of wings would be more desirable for the original unit.

AN ARTISTIC EXTERIOR WITH AN ATTRACTIVE APPROACH

THE site of the building in this plan, the approach and the landscape are excellent. The hospital building, however, is much too large to be constructed and operated economically as a forty-bed hospital. Thought should have been given to the planning of the original unit of the hospital with a smaller number of wings, wings to be added later when the demands upon the institution made it necessary to increase its capacity from forty to say sixty, eighty, or a hundred beds. The future addition indicated on the plan calls for the construction of a separate building. This would necessitate an additional elevator as well as utilities.

The elevation should be at least two feet more above grade so as to permit the construction of a half basement in the front wings. The space under these wings should be excavated as the space thus created will be of great value as the hospital develops.

The location of the boiler room in front of the basement, just back of the front steps, is bad planning. How can coal be delivered to, and the ashes removed from, the hospital, except by having trucks coming to the front door? The architect may have considered wheeling the coal from the rear of the building through the corridor and down the incline, but this is clearly an uneconomical arrangement. If the hospital is not large enough to justify a separate service building, the boiler room should be located in the rear of the basement. As it is, this room is very dark and small. There appears to be no provision for fuel storage nor is there provision for a morgue.

The vestibule, reception room and offices are not conveniently arranged. In its present location, the reception room is bound to be very dark. These rooms should be re-arranged so as to give the reception room better light and ventilation and bring the general office and record rooms into close juxtaposition. Less space, moreover, should be given to the vestibule and more to the reception room and offices.

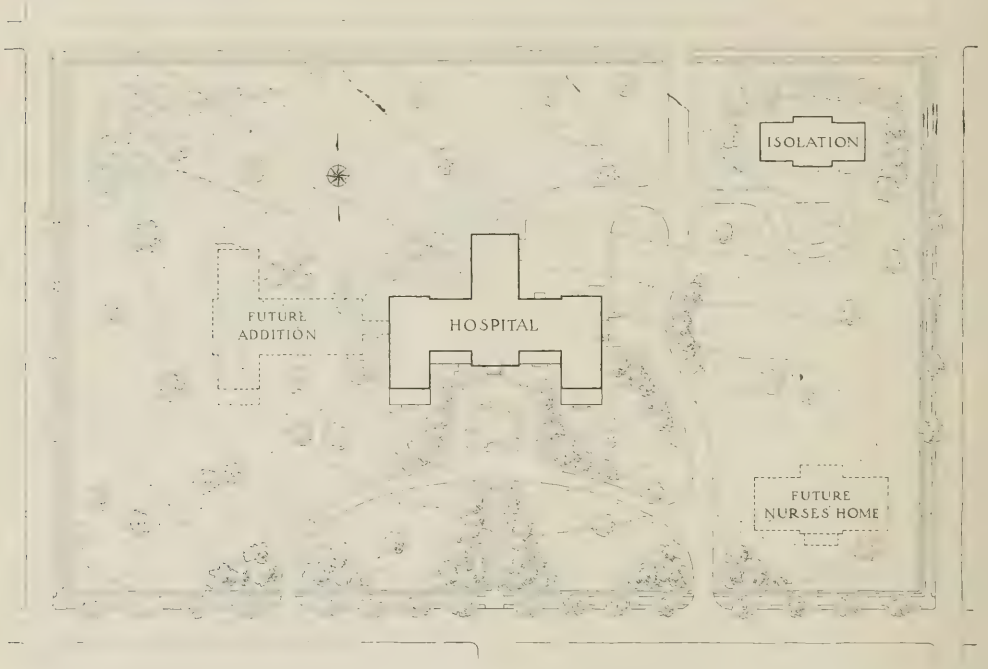
The utility rooms on the various floors are too far from the wards and rooms and some of them are directly opposite private rooms. The present plan practically necessitates the installation of two utility rooms and entails expensive duplication. In a small hospital a bath is not needed in the ambulance receiving and surgical dressing rooms. The space could be used to better purposes.

The operating suite is exceedingly well planned. It would be desirable, however, to have a door leading from

the corridor into the nurses' dressing room. Nowadays hospitals are getting away from the practice of locating the operation suite on the first floor. The superintendent's suite faces the male ward. In hospital planning today this arrangement, of course, is avoided. It would be preferable to interchange the position of the X-ray and laboratory departments.

The second floor is quite well planned but it is always advisable to make the maternity department a distinct division with a doorway in the corridor to prevent the passage of sounds down the corridors to the private rooms of medical and surgical patients. Private rooms having a width of from nine to ten feet are unsatisfactory on account of the handling of stretchers and so forth. Irrespective of their length, private rooms less than eleven feet wide or having a floor space of less than 132 square feet are quite inadequate. The best suite on the second floor has been assigned to female help. It is desirable to place the graduate nurses' dressing room under the department of administration.

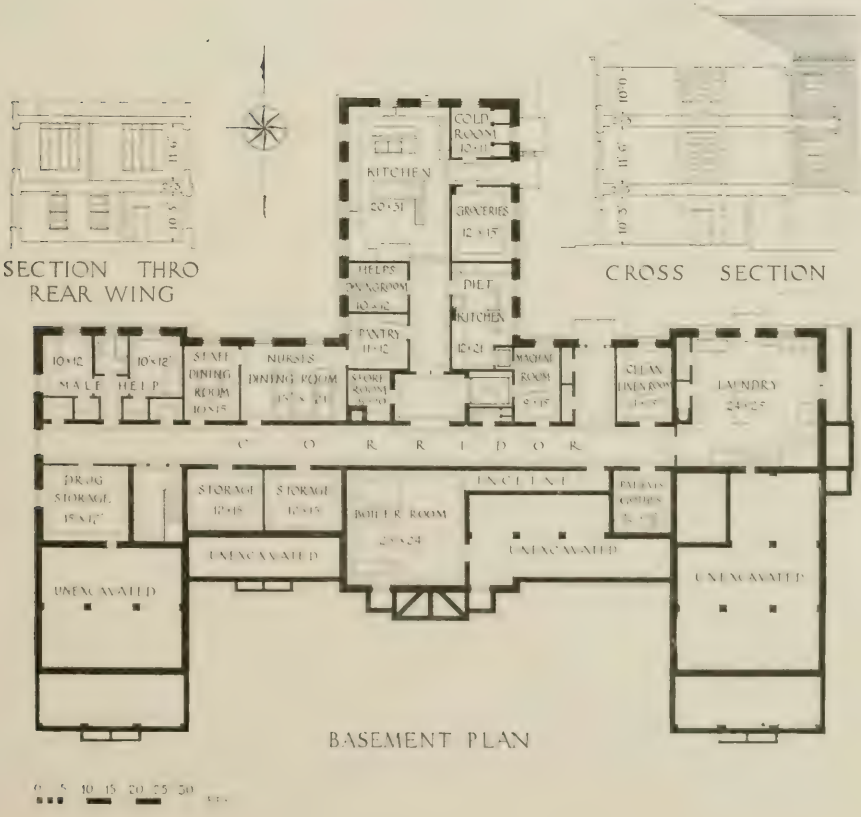
The artistic colonial effect produced by this building is simple and attractive and would undoubtedly make a welcome addition to the public buildings of almost any small community.

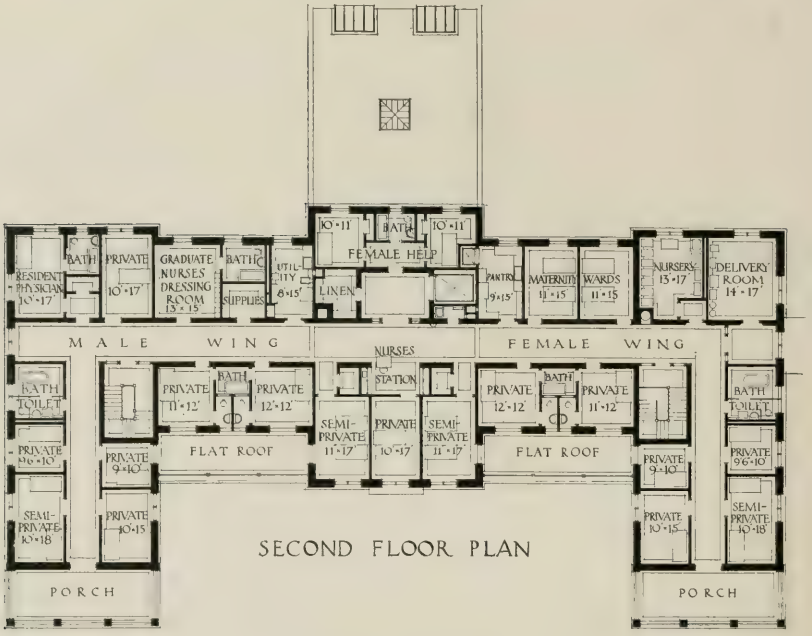


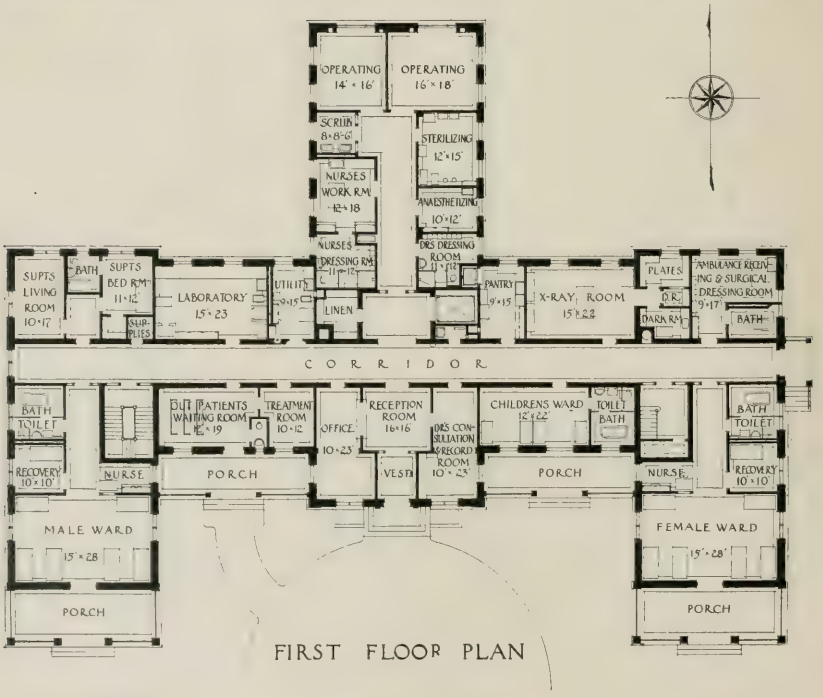
PLOT PLAN

REAR ELEVATION

SIDE ELEVATION




FEMALE HELP
MALE WING
NURSES STATION
FEMALE WING
FLAT ROOF
FLAT ROOF
PORCH
PORCH
SECOND FLOOR PLAN


OPERATING 14' × 16'
OPERATING 16' × 18'
CORRIDOR
MALE WARD 15' × 28'
FEMALE WARD 15' × 28'
PORCH
PORCH
FIRST FLOOR PLAN
0 5 10 15 20 25 30 FEET

A semi-circular front might lend a more pleasing appearance to this design by Carl J Malmfeldt of Hartford, Conn. The arrangement, on the whole, is one which could be made very practical by a few alterations.

A FEW REVISIONS WILL MAKE THIS BUILDING A PRACTICAL PLAN

THESE plans are fairly good, on the whole, although some radical revision, especially of the basement, is necessary. The general appearance of the front elevation is marred by the porches on the two wings. These porches might have been handled to better advantage, possibly, by making the outline of the front semi-circular. The height of this building justifies a flat roof with perfectly straight lines.

This applies also to the porches. Such an arrangement would enable the roof to be used to good advantage. Under this plan, the future calls for the construction of a separate building, "D." As this building is separated somewhat from the original edifice, it would doubtless require a separate elevator and service departments, a serious handicap to operating the hospital economically. The elevator and stairway should preferably have been placed at the center of the building thereby making possible the construction of a future wing from that point.

The whole basement plan needs radical revision. The boiler room is inadequate in depth; it should have a minimum depth of eighteen feet. The location of the morgue opposite the kitchen and dining room and adjacent to the hospital refrigerator, is highly objectionable. The storage space set aside for patients' clothing is large enough to take care of several hundred patients. The hospital, however, will be able to put this space to good use for other storage purposes.

The first floor is fairly well planned. The nurses' dining room is probably a bit too large for a hospital of this size. It is unfortunate that a closet and bath occupy the corner of the building set aside for the superintendent's apartments. The laboratory and drug rooms also take very valuable space. If the helps' quarters were changed from the basement to the attic, the laboratory and drug room could be placed in the basement and this excellent space could thus be conserved for better use.

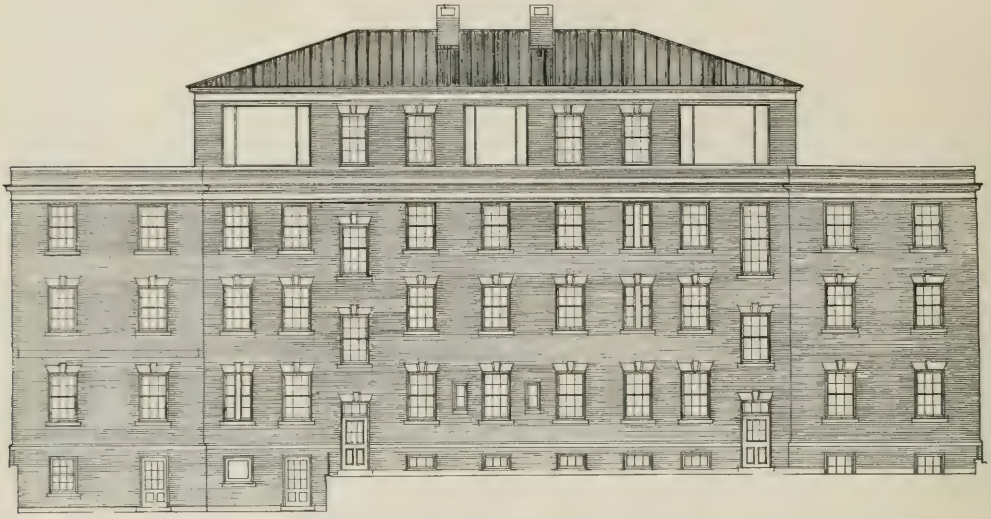
The second and third floors could have been planned to better advantage by placing the private patients on the first floor instead of on the second.

By placing the birth room on the operating floor, a certain control of the maternity department is lost and, because of this, might require additional attendants. However, from the standpoint of sounds, it is ideally located.

The doctor's room should be located at the entrance to the operating suite and not at the far end. The present arrangement necessitates his passing in his street clothes through the clean operating suite. It would be advisable to place a doorway at the entrance to the operating suite. It would be preferable to place the X-ray department on

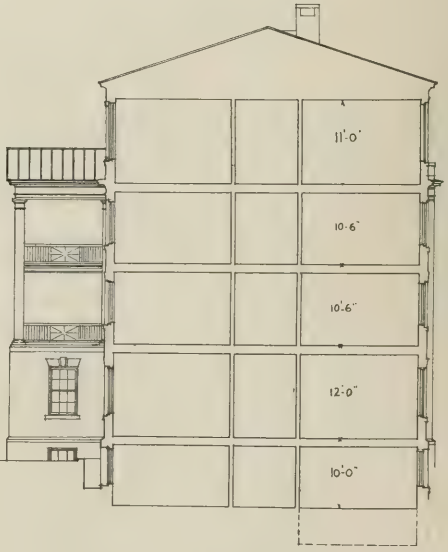
the first floor in close relationship to the out-patients' department. The elevator and stairs are particularly bad in this building as there is no fire cut-off and the noise of closing and opening the elevator doors is bound to disturb the patients.

Barring the radical revision of the basement and minor changes in the other floors, this is a well-conceived plan for a small community hospital and makes adequate provision for the purposes such an institution is called upon to serve.

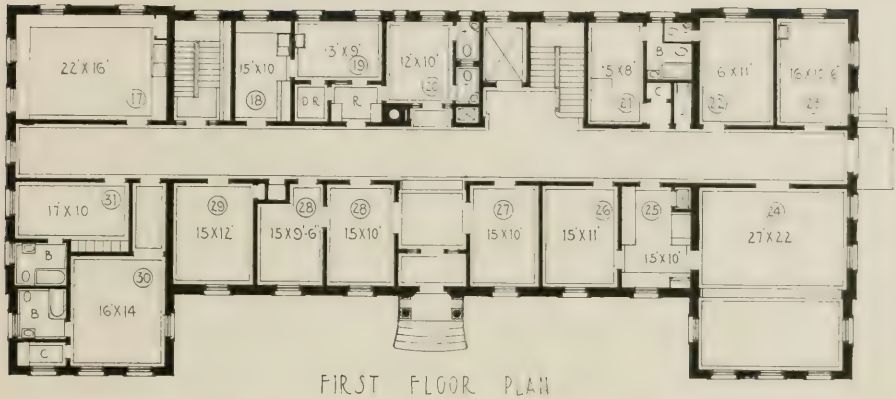


NORTH ELEVATION

WEST ELEVATION

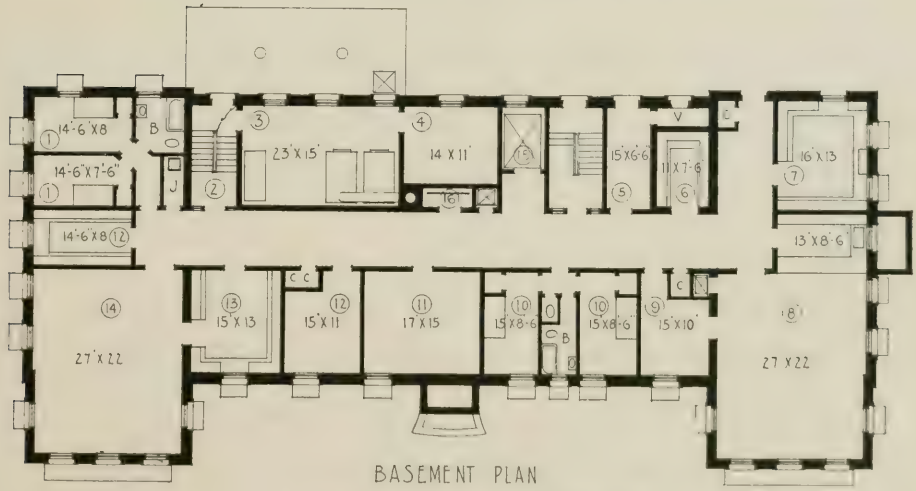


SECTION



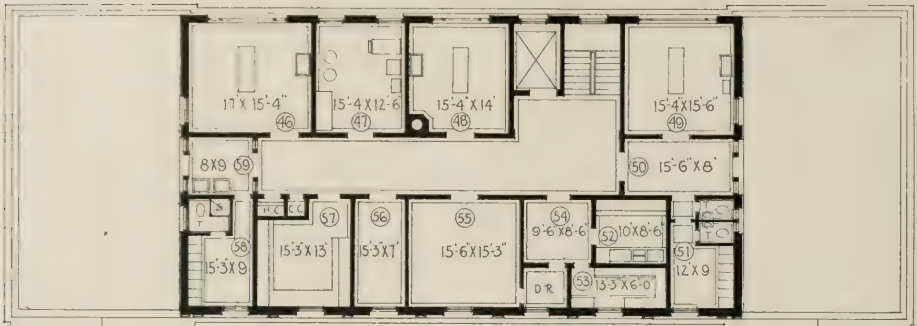
FIRST FLOOR PLAN

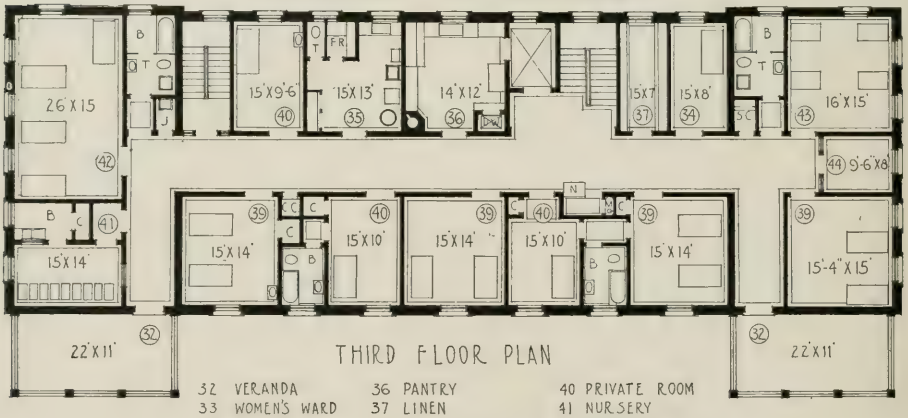
17 LABORATORY
18 DRUG ROOM
19 TREATMENT ROOM
20 WAITING ROOM
21 RESIDENT PHYSICIAN
22 VISITING DOCTORS
23 ACCIDENT RECEIVING
24 NURSES DINING ROOM
25 SERVING ROOM
26 OFFICERS DINING ROOM
27 RECEPTION ROOM
28 OFFICE
29 HISTORY ROOM
30 SUPERINTENDANT
31 GRADUATE NURSES

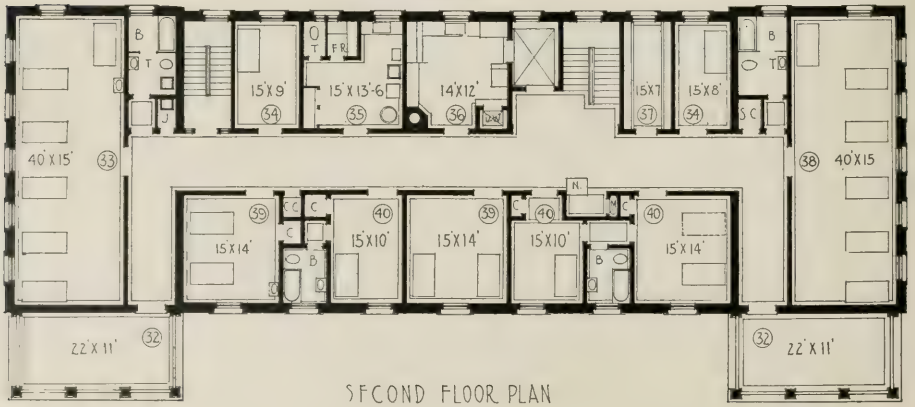


BASEMENT PLAN

1 FEMALE HELP
2 FIRE TOWER
3 BOILER ROOM
4 MACHINERY ROOM
5 MORGUE
6 COLD STORAGE
7 GROCERY STORAGE
8 KITCHEN
9 HELPS DINING ROOM
10 MALE HELP
11 PATIENTS CLOTHING STORAGE
12 SUPPLY STORAGE
13 CLEAN LINEN ROOM
14 LAUNDRY
15 ELEVATOR
16 SWITCHBOARD


17'X 15'-4"
15'-4X12'-6
15'-4"X14'
15'-4"X15'-6"
8X9
15'-6"X8'
15'-3X13'
15'-3X7'
15'-6X15'-3"
9'-6"X8'-6"
10'X8'-6"
12'X9'
13'-3"X6'-0"
D R
FOURTH FLOOR PLAN
46 OPERATING ROOM
47 STERILIZING ROOM
48 MINOR OPERATING
49 BIRTH ROOM
50 ANTE ROOM
51 NURSES
52 DARK ROOM
53 PLATE STORAGE
54 CONTROL ROOM
55 X'RAY ROOM
56 ANESTHESIA
57 NURSES WORKROOM
58 DOCTORS
59 SCRUB-UP ROOM

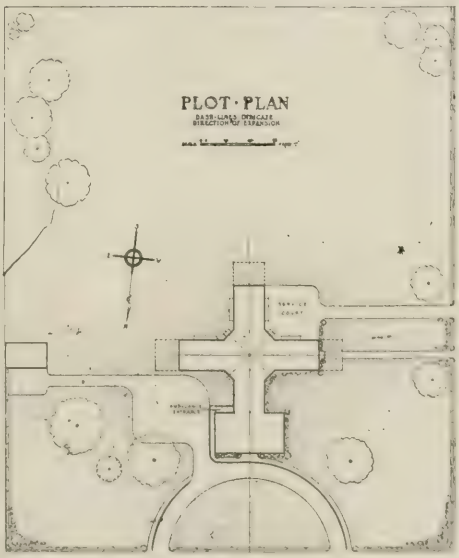

26'X15'
15'X9'6"
15'X13'
14'X12'
15'X7'
15'X8'
16'X15'
9'6"X8'
15'X14'
15'X10'
15'-4"X15'
22'X11'
THIRD FLOOR PLAN
32 VERANDA
33 WOMEN'S WARD
34 RECOVERY
35 UTILITY ROOM
36 PANTRY
37 LINEN
38 MEN'S WARD
39 SEMI-PRIVATE ROOM
40 PRIVATE ROOM
41 NURSERY
42 MATERNITY WARD
43 CHILDREN'S WARD
44 SPECIAL NURSES


40'X15'
15'X9'
15'X13'-6
14'X12'
15'X7'
15'X8'
15'X14'
15'X10'
22'X11'
SECOND FLOOR PLAN

For a large hospital, this design by John J. Regan and William Carter Halbert of New York City is splendid in arrangement of services, but it is too large for the needs of the average community. The semi-mission style is both attractive and practical.

A DESIGN ILLUSTRATING WELL-ARRANGED INDIVIDUAL DEPARTMENTS

ALTHOUGH given a relatively high mark by the committee on awards of THE MODERN HOSPITAL'S prize architectural contest, the plan of John J. Regan and William Carter Halbert did not receive a prize primarily because it is extravagantly large for a small thirty to forty bed hospital and so arranged as to demand an unnecessary number of nursing units. Its individual departments, however, are on the whole efficiently arranged. They give evidence of having been fairly well considered in their relation to one another, and offer an excellent opportunity for study.



The first unit of the small hospital of which the present plan may be the expanded hospital, might conceivably have been planned as one straight building or as a T-shaped building. The plan suggests that the architect is familiar with the plans of the New York Dispensary and Hospital for Joint Diseases. The site and orientation of the building are satisfactory, and the building lends itself readily to additions; the semi-mission style of the treatment of the end wings should prove attractive in a community hospital.

The scheme, if applied to a larger hospital, lends itself splendidly to the arrangement of services and practical requirements, but the cost of constructing and maintaining this hospital is beyond the means of the average community—and the average community is what we have to bear in mind.

The plan gives a maximum amount of light and air. It does not give as many bed accommodations as could be provided by a quadrangle or L shaped building having the same cubic feet of air space.

The plan of the octagonal center, while extravagrant, has been well considered in relation to the plan as a whole. It would be well if the basement could be made a half basement instead of being placed wholly below the ground level. But one toilet room has been provided for the help in the basement; there should be provision for two toilet and locker rooms.

Were the plan to be revised and a half basement provided, it would be advisable to consider placing the kitchen and dining rooms in the basement instead of on the first floor.

At the entrance to the first floor all the essential offices and rooms have been provided for. It would be well, however, to place the nurses' locker room near the executive department. This room, by the way, is much too large for a small hospital.

The separate approach to the out-patient department is excellent. The elevator has no vestibule; it is always well to provide this when planning a hospital.

The x-ray suite on the second floor is badly placed. It should preferably be placed adjacent to the operating suite, the out-patient department or the emergency department, thereby making it readily accessible to one of the three important departments that are likely to use it.

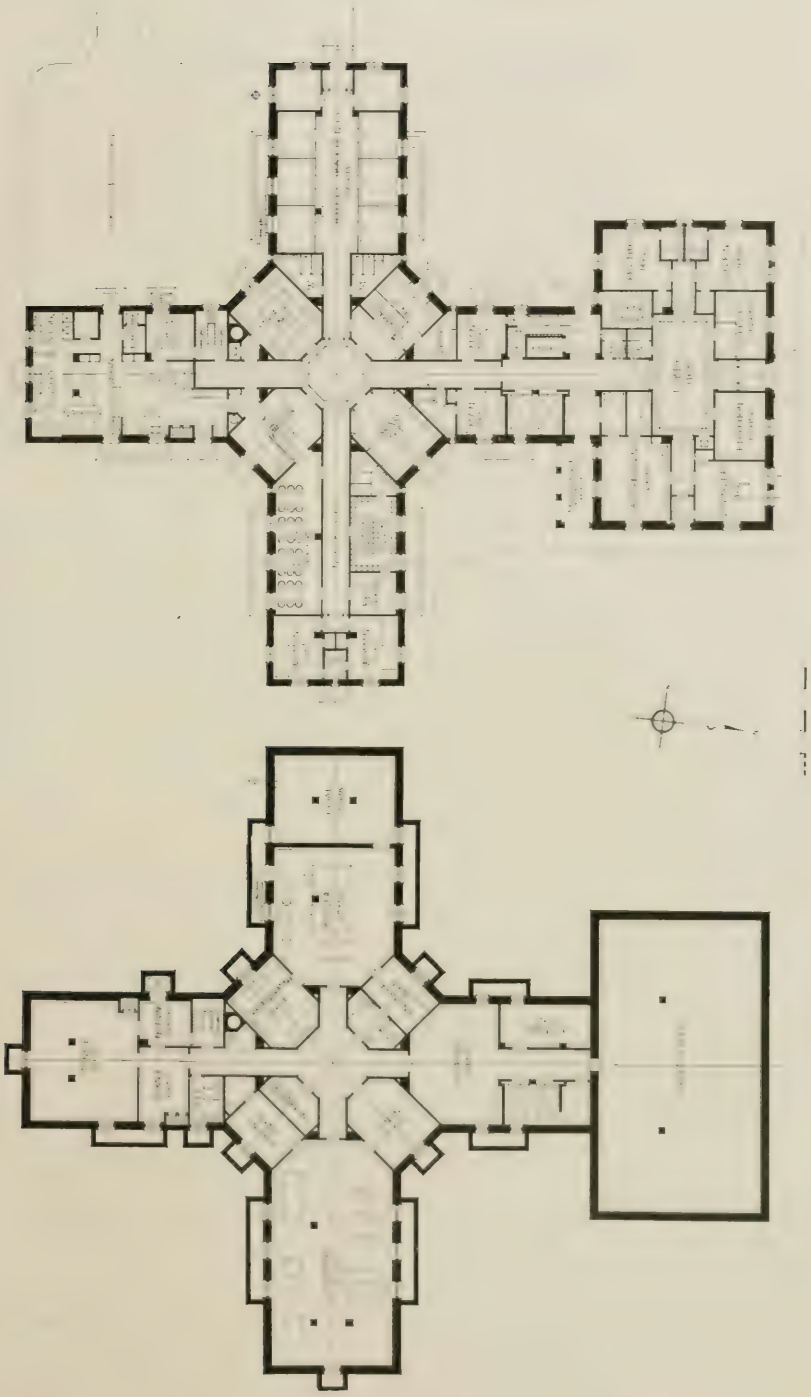
The third floor has been well thought out in reference to the private rooms and their utilities. Complete facilities have been provided in the operating suite, but doctors' and nurses' toilet and locker rooms should be nearer the entrance. Inasmuch as the doctors as well as the nurses need lockers, we are at a loss to understand why the architect provided the nurses with eleven lockers and doctors with none. The location of the main laboratory in the operating suite is extremely bad practice on account of the specimens that must of necessity be taken to the laboratory from the various departments of the hospitals and on account of the type of work the main laboratory is called upon to do. Miscellaneous specimens should never be taken through an operating suite. As indicated before this is, with some minor exceptions, an excellent plan for a large hospital, although it is obviously too large to be considered on the basis of the thirty to forty bed size.

NORTH · ELEVATION ·

EAST · ELEVATION ·

· SOUTH · ELEVATION ·

EDITOR'S NOTE.—Plans and comments upon several other selected designs will follow in the July issue.



· THIRD · FLOOR · PLAN ·
PRIVATE ROOM FLOOR-16 BEDS

· SECOND · FLOOR · PLAN ·
WARD FLOOR-20 BEDS

THE ROLE OF NON-MEDICAL CLINICAL ASSISTANTS IN HOSPITALS WITHOUT INTERNS*

By S. S. GOLDWATER, M.D., Director, and E. M. BLUESTONE, M.D., Assistant Director, Mount Sinai Hospital, New York.

THE role of the non-medical assistant in hospitals without interns is one which has not yet been thoroughly investigated or appraised. The subject may be considered by ascertaining the actual contribution that assistants are making to hospital service; by considering the manner in which and the extent to which their services may be utilized to advantage; and finally, by inquiring into existing or potential opportunities for the training of such assistants, and the logical content of a course of training to fit non-medical aids for fruitful hospital service.

It is encouraging to know that the American Conference on Hospital Service has taken official cognizance of this problem. On September 27, 1922, at the semi-annual meeting of the conference at Atlantic City, N. J., the trustees resolved:

"To make a quantitative and qualitative investigation of the minor clinical procedures incidental to the diagnosis and treatment of the sick in hospitals.

"To make an investigation (preferably with the aid and cooperation of the Council on Medical Education and Hospitals of the American Medical Association and with such other constituent members of the Conference and other organizations as may be willing and able to assist) of the relationship of the minor clinical procedures indicated in the above paragraph to the training of interns; and of the extent to which interns possessing a medical degree or who are candidates for a degree, are now or are likely in the future to be available for service in hospitals.

"To outline a plan for the education and training of non-medical clinical aids in history taking, clinical recording, first aid, surgical dressings, technic of the operating room, laboratory technic and other service incidental to diagnosis and treatment; also to determine the preliminary educational qualification of candidates for the suggested courses.

"To inquire into the resources of existing educational and medical institutions for carrying out this training and to indicate the type of organization which is best fitted to undertake it.

"To suggest a program for the utilization of the services of persons educated and trained in the subjects referred to in hospitals with and without interns."

A recent announcement of the conference declares that: "a committee composed of representatives of the constituent organizations of the Conference will begin work in the near future in making surveys and in organizing the necessary agencies to carry out the purpose included in the above resolutions."

Our discussion may therefore be regarded as a prelude to the wider and more searching investigation and discussion which is about to be inaugurated.

Shortage of Interns Is Chronic

The activities of non-medical clinical assistants have a two-fold origin. One of these is the fact that many hospitals that desire to employ interns are unable to secure them; the other is the fact that hospitals that employ interns have in some instances deemed it wise to relieve their interns of time-honored and arduous but relatively simple duties.

The shortage of interns has become chronic. In 1920 out of 6,440 hospitals which were requested by the American Medical Association to express an opinion on the subject of interns, only 1,126 reported that they desired to have interns, and of this number only 593 or approximately one-half were found in condition to furnish satisfactory internships. Roughly speaking it may be said that about 10 per cent of the hospitals in the United States having more than ten beds each, are able to offer satisfactory internships, and that these hospitals, which represent approximately 50 per cent of the total hospital bed capacity of the United States, are in a position to absorb the whole number of graduating medical students, thus leaving unsupplied with interns 50 per cent of all hospital beds.

Hospitals which are accustomed to the services of interns experience acute distress when deprived of such services. The sudden withdrawal of interns from hospitals during the war started something like a panic. Hospitals were unwilling to do without a system which they had come to regard as indispensable, and in their eagerness to keep their organizations intact, they began to offer financial rewards for interns, bidding against each other in a competition that was far from dignified, and that eventually defeated its own ends. In hundreds of hospitals the unsalaried intern was replaced by the salaried intern; but although by this means a small number of older physicians were induced to abandon private practice and resume institutional work, the general hospital situation was not greatly altered, for the principal effect of the bidding up of salaries was the mere fruitless shifting of interns from one hospital to another.

Clinical Work Suffers Without Interns

The cessation of the war brought no adequate relief. The number of hospital beds, and more especially the demand for intensive technical services incidental to diagnosis and to the treatment of hospital patients, continue to increase at a rate which indicates a continued shortage of interns; and this is a condition which cannot be disregarded, since it is now generally believed that hospitals which are deprived of the services of interns are more than likely to be frustrated in any attempt at the proper organization and standardization of their clinical work.

The American College of Surgeons has shown that clinical records are important in all hospitals, both great and small, but it is futile to talk about perfecting the clinical records of small hospitals unless a substitute for the intern can be provided. With the best will in the world, the visiting staff of hospitals that have no interns cannot see patients promptly enough after admission; they cannot take proper histories, satisfactorily record operations, furnish or secure adequate and timely assistance at major surgical operations, render prompt first aid in minor accident cases, make adequate clinical notes of the progress of their cases, make sufficiently frequent urinary analyses and blood examinations, or give suitable attention to infected wounds which require time-consuming treatment. For all of this work resident assistants are needed, and for some of it non-medical aids are already extensively employed.

Non-Medical Aids Already Widely Used

In 1919 the publishers of The Modern Hospital generously consented to circulate among the small hospitals of the country a questionnaire the answers to which throw important light upon the present problem. One of the questions asked was: *"Have graduate nurses or others ever been used by you as anesthetists, surgical assistants, laboratory technicians, clinical registrars, or in any capacity for which interns would be employed if available? If so, have their services been satisfactory?"* Three hundred and seventy-five hospitals replied, and of this number

*Read by Dr. S. S. Goldwater at the annual Congress of Medical Education, Licensure, Public Health and Hospitals, Chicago, March 6.

257 reported some such employment. Hence to the dictum of the American Conference on Hospital Service, which declared that "it is the opinion of a large number of individuals qualified by education and experience in the hospital field, that properly educated and trained non-medical hospital, clinical and laboratory assistants may be utilized as aids to interns, when this is necessary, or as substitutes in hospitals which are unable to secure interns," may be appended the statement that numbers of individuals are actually being employed in such capacities, though without any well-directed or concerted effort on the part of the medical profession to scrutinize the training or the qualifications of these persons for the work which has been entrusted to them.

A study of the answers given to the question concerning the satisfactory or unsatisfactory nature of the service rendered by non-medical clinical aids yields the following results.

A. Nurse anesthetists		(b) Unsatisfactory	1
(a) Services satisfactory	42	(c) No opinion	13
(b) Unsatisfactory	..	D. Clinical historians	
(c) No opinion	15	(a) Satisfactory	14
B. Surgical assistants		(b) Unsatisfactory	..
(a) Satisfactory	21	(c) No opinion	4
(b) Unsatisfactory	..	E. Service not specified	
(c) No opinion	14	(a) Satisfactory	88
C. Laboratory technicians		(b) Unsatisfactory	6
(a) Satisfactory	17	(c) No opinion	78

We have, in these figures and opinions, at least a partial answer to our question concerning the manner in which the services of non-medical clinical assistants may advantageously be employed, and a bare suggestion concerning the direction to be followed in establishing a suitable comprehensive course of training for the group in question.

It would be folly to enlist the services of non-medical personnel to satisfy a need which is fundamentally a medical need, if any other expedient were available. Apparently no other expedient will entirely meet the situation. The growing enrollment of medical undergraduates offers some but not sufficient relief; for, as the number of medical graduates increases, so also does the ratio of interns to patients increase in well-organized hospitals. Here and there visiting physicians in attendance at small hospitals assert that in the absence of interns the visiting staff assume the interns' duties. In rare instances this is no doubt true, but if our own observations in small hospitals are in any sense typical, the performance of the average visiting physician in this regard does not advance beyond pious intention. What one usually finds in hospitals without interns is a beautiful sheet of virgin white history paper, unspotted by the characteristically illegible penmanship of the clinical historian; a shocking lack of routine laboratory tests; and the tranquil, gossipy, unscientific atmosphere of an invalids' boarding house, rather than the purposeful, businesslike air of a well conducted hospital.

Small Hospitals Not Apt to Consolidate

It has been suggested that there are too many petty hospitals, that the consolidation of groups of the smallest units into hospitals of greater size is entirely practicable in the more densely populated parts of the country, and that such consolidation would simplify the administrative problems of hospitals, would make for economy, and would pave the way for improved clinical work. This is not a thought that should be lightly cast aside; yet it cannot be accepted as a satisfactory solution of the problem, for while it may be true that in a given community a single hospital of 50 beds might be able to command the services of an intern while three smaller hospitals with an aggregate capacity of 50 beds could not do so, we cannot disregard the fact that such consolidations are not likely, during the present generation, to take place in numbers sufficient to improve the general situation materially; besides which we have already seen the total number of available medical graduates is inadequate to furnish interns for the total number of hospital beds, however these beds may be distributed.

If the larger hospitals which employ interns exclusively could be persuaded to employ mixed forces of interns and non-medical technicians, a considerable number of interns might thus be released for service in the smaller hospitals. But whose is the silver tongue that will persuade the larger hospitals to embark on so self-sacrificing an enterprise? Not a few of the larger hospitals are, as a matter of fact, employing non-medical anesthetists, surgical assistants, laboratory workers, and clinical secretaries, but the ratio of interns to patients is usually greatest precisely in those hospitals in which these extra workers are employed. In these hospitals, the chief purpose of the employment of non-medical clinical aids is to relieve rapidly changing and relatively unskilled interns of the duties which they perform least satisfactorily, and to substitute workers who through long-continued practice, eventually acquire a high degree of technical proficiency.

The relatively extensive employment of non-medical persons in the most progressive and scientifically productive hospitals suggests that progress in medical science is dependent in a measure on efficient non-medical aid in the performance of work which does not necessarily require medical training and judgment. But in assigning clinical functions to a non-medical personnel it is necessary to proceed with caution, lest we unwittingly overstep the safe and proper limits of such a program. The American Conference on Hospital Service has already sounded a note of warning in its declaration that "the work of non-medical assistants in wards and laboratories should be carried on under the direction of and must be reviewed and checked by the attending staff or by the house staff or by both."

Training Course Should Be Worked Out

The inauguration of a comprehensive course of training for non-medical clinical aids was first publicly suggested by us about three years ago. Many women had previously been intensively trained as either anesthetists, surgical assistants or laboratory workers, but women with this special and intensive training are not qualified for the broader and more varied work of clinical aids which is here contemplated; moreover, most of the women who have taken this special training have been rapidly absorbed by the larger hospitals as helpers to the intern staff and have therefore failed to bring relief to the smaller institutions that have no interns to be relieved or helped out in this way.

It is believed that in from twelve to eighteen months an intelligent graduate nurse can be taught to perform all that part of an intern's work which does not involve diagnosis and treatment, with the exception of the more difficult laboratory and bedside procedures. An appropriate course of training would include anesthetization, first aid, surgical dressing, simple clinical procedures (both diagnostic and therapeutic), laboratory technique, history taking, technique of the operating room, and the filing of clinical records. Just as soon as the details of such a course have been worked out by a competent committee, an effort should be made to establish this training in schools of nursing associated with hospitals possessing sufficiently varied and extensive clinical and laboratory facilities to afford a background for thorough work.

Appendix

It occurred to us that it would be profitable to supplement the foregoing general discussion by an analysis of the activities of interns in a general hospital.

The functions of interns vary in different hospitals according to (1) clinical work required; (2) clerical work required; (3) social work required; (4) number of beds assigned; (5) character of service, whether acute or chronic, ward or private, contagious, obstetrical, psychopathic, medical, surgical or special; (6) duties in connection with the educational function of the hospital; (7) the number and kind of clinical assistants provided.—nurse, attendant, orderly, secretary, technician; (8) the number of members of the visiting staff to whom the members of the house staff are responsible; (9) the length of service, method of grading, and period spent in each grade; (10) the character and equipment of the hospital.

History Taking

In a typical medical or surgical service, the duties of the house staff begin, on the arrival of the patient, with the taking of the history. The time devoted to history taking is dependent on many factors. The patient may be an adult or a child; may or may not be intelligent in his replies, may require an interpreter; or may be stuporous or unconscious, in which case it may be necessary to obtain the history from a friend or relative. The clinical condition may call for a simple history, or it may require painstaking historical research. Histories must be taken at all hours, and often in bunches. The time demanded of medical men for taking histories is lessened where clerical help is available. Although, as a rule, members of the visiting staff do not conscientiously read lengthy histories, but, as a basis for their clinical judgments, content themselves with a series of rapid-fire questions addressed to the patient, it is commonly considered good practice for the intern to write histories, and the importance of complete records cannot be gainsaid. In studying the time factor in taking histories we must remember the importance of searching for and abstracting old charts in the case of patients who were previously admitted. The average time for taking a history in a general hospital is half an hour. In Mount Sinai Hospital, history taking, in a 100 bed service, having an average of forty admissions a week, consumes three hours per day. On this basis, in a 50 bed hospital, the time for history taking would be about an hour and a half per day.

The procedure which logically follows the taking of the history is the physical examination. The physical examination is also subject to many time variations, but this is so obviously a non-transferable clinical function that it is unnecessary here to discuss the subject at any great length. Routine physical examinations at the Mount Sinai Hospital consume about three hours per 100 bed service per day (this refers to the work of the house staff, which is, of course, repeated by the "visiting"). In a 50 bed hospital, under similar conditions, the time required for this function would, therefore, be about an hour and a half per day, or about the same length of time that is needed to obtain histories.

Special Diagnostic Procedures

We may consider next the special diagnostic procedures, only the less technical and hazardous of which may be assigned to a clinical aid. There are punctures of various sorts, of the head, chest, abdomen, spinal canal, and veins, and these require clinical skill. There are cystoscopies, bronchoscopies, and the use of other instruments for the examination of body cavities which, as a rule, only the skilled visiting physician can perform, and which certainly cannot be passed on to the clinical aid. The determination of blood pressure, however, may be effected by a trained non-medical clinical assistant. This is true also of unobstructed bladder catheterizations. Blood pressures alone, if done by a clinical aid, would reduce the intern's day by half an hour per 100 bed service, if we allow five minutes as the average time for this procedure.

Many special diagnostic tests require unusual skill and are therefore performed by the attending staff. The various forms of puncture take about one hour per 100 bed service per day at Mount Sinai Hospital, where adequate nursing help is at hand. Vein punctures have been known to be successful in the hands of a well-trained nurse.

The examination of the special senses requires about half an hour per 100 bed service per day.

In Mount Sinai Hospital histories, physical examinations, and special diagnostic tests combined consume approximately eight hours per 100 bed service per day. Special tests, such as the determination of basal metabolism, the electrocardiograph, or the x-ray, are not included here since they are done by specially trained medical men, though the employment of non-medical x-ray technicians is fairly common elsewhere.

Laboratory procedures may be considered under two headings: those which are done by laboratory experts, and those which are done by interns or by laboratory technicians. In the former group are included the more difficult bacteriological and pathological examinations; in the latter, routine clinical pathology. Routine clinical pathology is usually assigned to the younger members of the house staff as part of their medical education. In Mount Sinai Hospital one full-time technician for both surgical services and another for the two medical services would be sufficient to cover the needs.

Therapeutic Measures

We now come to general and special therapeutic measures. Directions for the treatment of a patient are necessarily given by the clinician, but the actual administration of drugs, and many other forms of therapy, are carried out by nurses. Operative treatment belongs to the staff. Special therapeutic procedures, such as hydro-therapy, physical therapy and radio-therapy, are rarely assigned to members of the house staff.

Intravenous medication and other medication requiring puncture, including transfusions, are at Mount Sinai Hospital left to the senior members of the intern staff. The amount of time consumed in carrying out these procedures varies within wide limits. The average time that is taken for intravenous medication is about half an hour per case, and the number of patients that require such medication obviously depends on the character of the service. Simpler injections, such as the administration of various forms of sera and salines, require about one quarter of an hour each. In Mount Sinai Hospital about half an hour per 100 bed service per day is taken up with such procedures. But there are many variants; thus a single case of meningitis may require the close attention of an intern for two hours a day.

In Mount Sinai Hospital the entire staff of each surgical service spends five hours daily in the operating room, but it is generally conceded that the second and third surgical assistants (interns in this case), the anesthetist, and the intern who passes instruments, might be replaced, perhaps with profit to surgeon and patient, by trained clinical aids.

Dressings may be discussed under four headings: first dressings, subsequent clean dressings, subsequent infected dressings, and difficult or special dressings. Dressings are done by junior and senior members of the house staff, and occasionally by members of the visiting staff. Very often dressings are left to nurses and a few to orderlies. In Mount Sinai Hospital dressings occupy about six hours per 100 bed service per day, or an average of about fifteen minutes per dressing, it being understood, of course, that all patients do not require daily dressings.

Rounds are made by members of the house staff alone, and also by the visiting staff accompanied by the house staff. Every member of the service is expected to attend rounds. Rounds involve incidental histories, physical examinations, and prescriptions of therapy; progress notes are recorded. In Mount Sinai Hospital, necessary rounds by responsible members of the house staff require about five hours per day for each surgical service, and eight hours per day for each medical service; in this calculation the time devoted to this function by non-active members of the house staff who are, so to speak, mere onlookers, is not included.

Other house staff duties are prescribed at Mount Sinai Hospital purely for the training of the interns. These include duties in the admitting room and in the pathological laboratory. A large number of the duties of the house staff, fully one-third, are extra-clinical, such as obtaining autopsies, consulting with the relatives of patients, writing certificates and reports, and issuing notices.

NEW YORK TUBERCULOSIS ASSOCIATION TO UNDERTAKE NEW SERVICE

The New York Tuberculosis Association has taken on a new work on behalf of the many tuberculosis institutions in New York and its vicinity. This auxiliary service will be similar to that already organized in the clinic field and will be called the Hospital Service of the New York Tuberculosis Association. The work will be carried on under the direction of F. D. Bell, an experienced public health worker.

A tentative program of work by the Association contemplates furnishing recreational diversions among the patients and assisting, where desired, in their health education. Other projects which are to be undertaken are the extension of occupational therapy, the exchange of administrative experience and the gathering of useful statistical information for the benefit of members as well as the arrangement of technical demonstrations for medical staffs and special lecture for nurses.

This new service is to be undertaken by the Association because it has long felt that a special recognition of the problems of the hospitals and cooperation with this group would benefit all concerned, particularly the tuberculosis patients who occupy more than 5,000 beds in these institutions.

JUDICIAL COUNCIL MAKES DECISION ON HOSPITAL ETHICS

A decision of vital interest to every hospital which wishes to be classed as an agency of scientific study has recently been made by the Judicial Council of the American Medical Association. The opinion of the Council follows:

> "The board of control of any hospital (not maintained by general taxation) has the legal right for reasons sufficient to the board to refuse the privileges of the hospital at any time to any practitioner, regardless of his so-called school of practice. The fact that the person applying for permission to bring to and treat in the hospital a particular patient is licensed by the State to practice does no alter the situation. The medical staff of a hospital likewise has the moral right to refuse to accept as an associate any person whom the staff may consider objectionable for reasons sufficient to the staff, and should insist on maintaining that right."

WRITING—A DUTY

By MINNIE GOODNOW, Superintendent of Nurses, Children's Hospital, Washington, D. C.

PROBABLY we all will agree that fiction is one thing and a technical article is another. We may go even farther and state that literature is one thing and writing is another. The conclusion that the editor wishes us to draw from these apparently harmless statements is that ordinary people can write acceptable articles for technical magazines. Let us see if this conclusion is warranted.

You do not accept a position because you can do the work better than anyone else, but because it needs to be done and you can do it with some degree of skill. Even the President of the United States is not always chosen because he is the best man for the job; yet he frequently proves a considerable success. In fiction, would-be novelists are advised not to write unless they feel an irresistible urge to express something which they feel the world needs; good advice, else the editorial waste-baskets would overflow more often than they do. For serious articles, the advice should be modified to read, "*Always write* if you can say anything which needs to be said."

Don't Need Course in Journalism

So it comes that our ability to say a thing better than anyone else is not so much the consideration as the fact that the thing needs, in one way or another, to be said. If we have any piece of experience or bit of knowledge of probable or possible use to other people, it is not egotism, but a duty to put it into print, so that it may be available to those who need it. Perhaps a similar thing appeared a few days ago. Who looks up the back files of magazines? Moreover, not all of the present readers were readers five years ago. Those who need help are the new readers, those recently come into the field, those who are meeting today's problems, not those of a few years ago. If we can give such help, are we not evading our duty if we withhold it?

Then you object, "But I can't write." The answer is, you can *learn* to write, and that without even a correspondence course in journalism. If you can think clearly, you can, with a certain amount of practice, write clearly. Often the editor's greatest need is a concise, understandable statement of things which you know or believe to be true, of matters which you have observed or worked out, or even a restatement of facts or methods which you think already well known. If the editor does not need it, or finds it not to the point, he will not be too soft-hearted to tell you. Editors are not that way. If he accepts an article, long or short, be assured that he and his readers really need it.

Simple Things Are Wanted

Personal experience may illustrate. A writer of hospital magazine articles and books for nurses says: "My first article to be published in a nursing journal was one page of pointers on teaching materia medica; my first in a popular magazine was information for girls who thought they wished to be nurses. Each was probably accepted because it was a concise statement of facts, and not for any literary merit which it possessed. I should probably never have written a book had not someone else seen that it was needed, convinced me of the need and prodded me until I supplied it. My two "best sellers" are books which I wrote under protest. In them I merely tried to state clearly and comprehensively what the other person had convinced me needed stating, putting it into the form in which I myself could best use it. It appeared that other people were wanting things as simple as that."

One suggestion is pertinent. Do not try to write for the highbrows, the important people, the leaders. They do not need your articles. Write for ordinary people, who need what you, an ordinary person, can give them. Just because you see things from the average viewpoint, you have a better chance of expressing them so that they may be helpful to the average person. Don't pretend to be a genius (though genius has been defined as "ability to see the obvious"), nor an authority on any subject. Merely start with the idea of trying to help people like yourself, or of just a little less experience, who are trying to find out the best way of doing things.

Clearness Is Chief Virtue in Writing

As to the technique of writing. Always make, and follow, an outline, for even the simplest article. Without it, your ideas run away with you, and you will probably fail of a clear statement. In making your first draft, write what seems to you vital at that time, without spending too much time on rhetoric or choice of words. Then, without reading over what you have written, put it away and forget it. In a week, get it out and read it aloud to yourself. You will probably see its strong points and its weak ones. It is likely to need some rearranging. It will almost surely need recasting in parts, classifying or pruning. There will be changes to be made in wording or phrasing. The process is much like trimming a hat or arranging a room. Examine every sentence for clearness. Have you said what you meant to say? How can you make it clearer? Challenge every statement, to see if it will "hold water." Do not try for style nor beauty nor vividness, merely for clearness. Conciseness may be overdone; verbosity is to be avoided. Good illustrations or examples always add to the forcefulness of any article or statement, and should be used if possible, since the reader may later recall the illustration and so remember your point.

Do not read your work to a friend nor ask an admirer for criticism, unless he is someone who has had a good deal of experience in writing. When you have done your best, send it to the editor. If he rejects it, try again. If he suggests changes, consider yourself complimented and make them. If your first attempt is not an entire success (whose ever was?) still the world is calling to you to help others by telling them the things which you—a commonplace person—have found out.

*Hospital Social Service, November, 1922.

DR. CARR ADDRESSES DIETITIANS

Dr. James G. Carr, associate professor of medicine at Northwestern University Medical School and a member of the staffs of Wesley Memorial and Cook County hospitals gave an address before the Chicago Dietetic Association Friday evening, May 18, on the subject of "Some Physiological and Clinical Studies of Nephritis." Dr. Carr has had wide experience in the treatment of this disease so that his lecture was of great practical value to dietitians.

PUBLIC VS. PRIVATE HOSPITALS—A SYMPOSIUM

RESOLVED, that private hospitals contribute more to the community than do public hospitals."

This might constitute a fair question for debate, since champions of both affirmative and negative could provide much substantial evidence of benefit. However, it is generally conceded that in at least metropolitan centers there is need for both types of institutions and that the dual system is here to stay.

Municipal hospitals are dependent largely for support upon grants from local governments. This in itself places certain limitations upon their program of work, inhibiting, for example, any great amount of research or experimental activities. Private hospitals, on the other hand, if they can secure the funds, are free to engage in whatever experiments they choose to make and to do as much research work as their finances will permit. Private hospitals as a rule are free to take all classes and types of patients. To municipal hospitals there gravitates principally the indigent, the chronic and types that private hospitals cannot or will not care for. Then there is the question of political control and its influence upon the public hospital in contrast to the private institution.

In an effort to bring before its readers, the ideas of thinking hospital administrators on this subject, THE MODERN HOSPITAL recently questioned several leaders in both public and private institutions on "the relative responsibility and programs of public and private hospitals." The following paragraphs briefly sketch the ideas of those addressed on the advantages of each system of ownership and control.

Need Coordination in Dual System

Dr. S. S. Goldwater, director of Mount Sinai Hospital, New York, a private institution, is an advocate of the introduction of private and semi-private patients into municipal hospitals. He can see no reason for the practice in this country of making public institutions exclusively for the care of the poor. In discussing the responsibilities, characteristics and opportunities of both types, Dr. Goldwater says:

"Partisans, whether of public or private hospitals, will agree that the hospital program of a large city should comprehend all social classes and all types of disease, and that this involves either an intelligently directed single system under central control, or a dual system, one branch of which at least shall be ready at all times to assume responsibility for rounding out and perfecting the community's hospital program.

"In the larger cities of the United States the dual system preponderates. New York, for example, has a dual system. It is inconceivable that in New York either the municipal or private hospitals will soon cease to function; and in my opinion it is not desirable that either group should discontinue any of its present major activities. On the contrary, the two groups should unite in a coordinated effort to meet the entire hospital need.

Favors Single System for Smaller Cities

"In cities with a population under 100,000, where a total of not more than 500 beds is needed, economy and efficiency suggest that there should be only one hospital, and it is immaterial or at least it is not vitally important, whether this hospital be conducted under voluntary or municipal auspices, for relative success may be achieved, or relative failure encountered under either system of control. If a city has but one hospital, however, it is vital that the hospital be recognized as an institution which is supported by, which belongs to, and which serves the whole community, and if the hospital be conducted by a voluntary organization, it is desirable that some contribution toward its support should be made by the municipality, and that the municipality thus signify its acceptance, in principal at least, if the responsibility of the community as a whole for the care of its sick.

"The argument for a dual hospital system in the greater cities does not rest upon the accident of the existence of such a system. If one were to start afresh in a city of the magnitude of New York, it would be desirable to set up both municipal and private hospitals. The hospital needs of a great American city are so vast, the financial requirements so enormous, the population so varied in its racial, religious and social complexion, that it is most unlikely that the entire need would ever be met by private contributions, or that all classes could be pleased and satisfied with the service of purely municipal hospitals of a single pattern, however admirable or meritorious.

"Hospital service in a great city is so vital a matter that it ought not to be left to chance, and there is an element of chance in the establishment, location and development of private hospitals. Such hospitals are more or less subject to the whims of individual givers, to the enthusiasm of individual organizations or to the mental limitations of their trustees and executives. This has its good as well as its evil side. The evil consists in the fact that the resulting system is bound to be marred by deficiencies and defects; the good, in the fact that the specific needs to which the municipality does not attend may be recognized by individuals and vigorous attempts may be made to supply them.

Voluntary Hospital Must Not Be Niggardly

"The voluntary hospital almost always sets for itself a high standard, though its actual achievement may and unfortunately often does fall far short of its intentions. But the voluntary hospital has no excuse for being niggardly; it should do its work well, or retire from the field. A municipality may and often is niggardly in its hospital appropriations; either political expediency or low civic ideals may dictate a low tax rate and enlightened public officials may appeal in vain for adequate support. Private hospitals are more willing and are in a better position than municipal hospitals to try experiments.

"Where private hospitals, supported by liberal donations, are conducted on a high medical and nursing plane, the municipal hospital is tempted to follow their lead; again and again public hospital administrators, in appealing for adequate appropriations, have cited the liberal standards and expenditures of private hospitals in the vicinity, and have thus promoted a worthy public cause. On the other hand, municipal hospital standards which are not subject to competition or to comparison with those of private institutions, tend to deteriorate, owing to the community's lack of knowledge of the best standards.

"Private hospitals usually enjoy exemption from taxation, and such exemption is sound public policy, for private hospitals relieve the city of part of its financial burden. No useful charity should be taxed. Many voluntary hospitals also receive grants of public funds; such grants may wisely be given, under proper restrictions, as a recognition of the municipality's interest in and responsibility for the care of its sick. But grants of public funds

to private hospitals should be proportioned to the amount of free work done, and should be kept below the full cost of such work, in order that the hospitals may be assured of remaining in the charge of those who are willing to spend themselves and their resources, and not fall into the hands of selfish individuals or groups.

"Contributions by the municipality, whether direct or indirect, toward the support of private hospitals, give the municipality the right, first, to determine the general conditions under which private hospitals may be established, and second, to lay down reasonable rules and regulations for their conduct, and such control, exercised with good will and with common sense, is socially beneficial. Unfortunately these regulatory opportunities are too often neglected.

"A perfunctory, political atmosphere clings to some public hospitals; while private hospitals are conducted, as a rule, in a spirit of loving kindness, which reacts in a wholesome and favorable manner upon all who are concerned in the enterprise. This reaction on those who create and support private hospitals is a valuable social by-product.

Public Hospitals Need Private Patients

"One advantage that the private hospital in this country has over most municipal hospitals lies in the fact that all social classes are cared for in the private hospital. Private patients are self-respecting, are apt to be aware of what is due a patient, and to demand proper accommodations and proper treatment. They are frequently visited by equally intelligent friends, and the hospitals thus come under the scrutiny of a large body of alert critics. Patients who know right from wrong methods have a salutary effect on the hospital personnel. In public institutions which are devoted wholly to the care of relatively ignorant and friendless patients, the manner and the moral fiber of the hospital personnel tend to become hardened. For these reasons, I should like to see private and semi-private patients brought into the municipal hospitals. Indeed, I can see no reason for a continuance of a distinction which is common in this country between private and municipal hospitals, the former limited to the care of patients who are able to pay their way, the latter undertaking exclusively the care of the poor. The fundamentals of adequate medical and nursing care should be provided in all hospitals, for everybody; luxuries may be added for those who are able to pay for them.

"It is probable that if private patients were introduced into municipal hospitals, voluntary donations of considerable magnitude would eventually be made to municipal hospitals as they are to private hospitals, for the rich would thus be brought into contact with needs of which they now have little or no realization. If it be said that this would unduly relieve the taxpayer, the answer is that gifts which are honestly applied by private hospitals for the benefit of the poor, likewise tend to lessen the need of public appropriations, and that no new principle is involved in this suggestion."

Private Hospitals Usually First in Field

Dr. C. W. Munger, superintendent of Blodgett Memorial Hospital, Grand Rapids, Mich., believes that it is the privately supported hospitals which have blazed the trail of hospital progress and that they have a right to assume joint guardianship with the city in its public health problems.

"The development of hospitalization of the sick in a community is usually brought about in the following manner," says Dr. C. W. Munger.

1. "There has been a woeful lack of hospital facilities, usually unheeded by city or county.

2. "This need in most cases has first been recognized by philanthropic private citizens who have established hospitals under private ownership and control. These hospitals have developed rapidly until,

3. "They are confronted with the need of funds to afford care for the indigent sick. The same philanthropic citizens have usually provided such funds as annual gifts or through endowments so that these institutions have taken charity as well as pay cases.

4. "As the community grows in population there seems always to be a concurrent increase in the number of citizens too poor to pay for hospital service. This increase finally overtaxes the philanthropic efforts of the community.

5. "The county or city government, because the private hospitals are inadequate, is forced to establish free hospitals. These municipal hospitals usually increase in size so as to take care of those persons who, for financial and other reasons, cannot be handled by the private institutions.

"The municipal hospitals, though sometimes hindered by graft and political interference, usually do work which is comparable to that of the best private institutions. They seldom, however, are able to obtain funds to carry on a great amount of research work in any line. There are numerous exceptions, but most such institutions are able to do little more than the routine scientific care of the sick.

Usually Pioneers in Progress

"It is only natural that the private hospital, which so often sees the ill effects of improper social and public health conditions, should attempt to extend its influence beyond its own four walls and to do all possible toward the prevention and early treatment of disease. Such institutions have established out-patient departments, have carried on public health propaganda, and rendered other services to their communities which otherwise would have been slighted. That such work as this is important and that it is badly needed in every community is well known.

"It is true that municipal hospitals are also rendering service along these lines. Is there any community, however, in which this work is so well and so thoroughly done that assistance from any quarter should not be welcome? At the present time it would seem, therefore, that any questioning of the right of the private hospital to assume joint guardianship with the city of its public health problems would approach the absurd. The privately supported institutions have practically always blazed the trail of hospital progress which the public institutions have followed, through many times all too slowly. Where would we be today without the pioneer work which has been done by some of our private hospitals? To insist that all such duties with regard to public health be turned over to city, county, or state would be immediately to discourage private philanthropy. Public health and hospital work would then be financed solely through taxation. The rich man would pay his taxes, of course, but in place of providing millions of dollars in gifts each year to be used for the public good, he would very likely divert these funds to more selfish purposes.

"The health activities of every community should of course be thoroughly organized and carefully correlated. Any institution, whether private or public, should inquire of this central organization as to the need of any particular service before it is instituted. Granting this correlation, the identity of agencies performing the various

activities seems of minor importance. There will seldom be any objection from the ranks of private institutions to the transfer of work to the municipal hospitals, provided it is certain that the work will be equally well done. Moreover, if the public interest can best be served by governmental financial assistance to the private hospital, is there any reason why such assistance should not be forthcoming?

"The private hospital, of course, has one function which is not assumed by the public, *i. e.*, the care of patients able to pay. For the present, and for a long time to come, it seems to the writer that the field of activity of these two types of hospitals must overlap in the matter of care of the sick poor and of general work for the public health. The very fact of the existence of private charitable hospitals with dispensaries, social workers and facilities for relief proves the fallacy of the idea that the care of the indigent sick and the promotion of public health can and will be efficiently cared for through governmental means."

Better Material for Study in City Hospitals

Howell Wright, executive secretary of the Cleveland Hospital Council, attempts to answer some criticism frequently directed against municipal hospitals in the following summary of his ideas of the dual system:

1. "The first obligation of a municipal hospital—that is, a public hospital supported by tax-collected funds—is to the indigent sick. As in Ohio, it must provide care for patients for purposes of protecting the public health—namely, contagious cases and acute venereal diseases.

2. "The public should stop thinking of municipal hospitals as boarding houses and nothing else. They have their functions. In communities where there are medical schools, such institutions should secure the best care of their sick by affiliating with the medical school and should serve the community by using its clinical material for purposes of education (that is, the training of doctors and nurses, as well as for the study of disease). Municipal hospitals have better material often for educational purposes than many of the public charitable hospitals. It is expensive and unfair to the community to attempt to duplicate in a public, charitable hospital the services and opportunities already available in a municipal hospital. Many so-called public, charitable hospitals are nothing more than boarding houses. Some of the so-called leading hospitals in this country are admittedly surgical boarding houses and are rendering relatively little community service. Often they are pet, private adjuncts of some prominent surgeon, and sometimes endowment funds for charity purposes are misspent for private purposes. A cross section of the municipal hospitals of this country, showing service and results of service, will present a favorable picture when compared with a cross section of the public, charitable hospitals showing service and results of service.

3. "Only rarely and subject, of course, to certain local conditions should a municipal hospital admit pay patients. Sometimes, however, some exception may be made in the case of contagious diseases although even then the prime responsibility should be for the care of the indigent sick. Private pavilions for private patients are out of place when operated in conjunction with a municipal hospital whose prime function is the care of the indigent sick.

4. "There should be close working relations between municipal hospitals and public, charitable hospitals in any community. With the proper public spirit, it is possible to have a pooling of interests and activities both in construction and operation. Philanthropic and other wealthy citizens cannot glorify themselves by erecting public, charitable hospitals and thus seek to escape their responsibilities toward institutions supported from tax collected funds. The trustees of a public, charitable hospital, operated under a charter, are holders of a public trust. Their institution is often exempt from taxation and accordingly the hospital has a community obligation—first, toward the indigent sick; second, toward any municipal hospital which may be supported by tax collected funds.

Politics Also Enters Private Institutions

5. "The question of politics affects both the municipal hospital and the public charitable hospital. It seems to be a common habit to talk about politics in our municipal hospitals. Political control has seriously affected some of our municipal hospitals, whether they be under the direction of a board of trustees or a single department head. On the other hand, there have been less changes in policy, service and development under boards of trustees. Politics is responsible for both expensive and wasteful construction and operation of some of our municipal hospitals. Politics is responsible for the same bad results in many of the so-called public charitable hospitals in the United States. Many of this group are no freer from politics than many of our municipal hospitals—the kind of politics (religious, Sunday School, medical, nursing or business politics) which keeps a man on the board of directors just because of his name, who neither directs nor trustees; that keeps Dr. Smith or Dr. Jones on the staff because he is a friend of So and So; that requires a superintendent to buy hospital supplies from this source or that because of the influence of certain trustees; that permits doctors to operate professionally in violation of the law; that sells its service at less than cost to those who can pay cost and charges the difference to endowment funds; that gives discounts and other special privileges to those not entitled to them. I say, the kind of politics that permits these things in the public, charitable hospitals and many others is just as dangerous and just as damaging as party politics in a municipal hospital. This translated and interpreted means that 'people who live in glass houses shouldn't thrown stones.'"

Ward Patients Receive Best Treatment

Dr. Ernst P. Boas, medical director of Montefiore Hospital for Chronic Diseases, New York, sees a real danger for patients in private hospitals and private positions of public hospitals unless some scheme is devised that provides effectual control of the professional work on the hospital. Dr. Boas says:

"The hospital treatment of ward patients has become highly perfected, so that it may fairly be said that in a well-organized hospital the ward patient receives the most expert attention, both from the point of view of diagnosis and treatment. This is due to the fact that all of the facilities of the hospital are placed at the command of the physician in charge of the case.

"It is fitting to inquire whether the patients in the private pavilions of hospitals or in private hospitals receive the same thoughful care and attention. Many physicians will agree that this is not the case. As a matter of fact, one not infrequently hears a doctor make the statement that he would rather be cared for on the ward than in a private pavilion. If we attempt to analyze the causes for this difference, we find two main factors at play:

"The first, and probably the most important one, is that a patient in the private pavilion, or on semi-private wards is considered the private property of the physician

who has had him admitted. This means that one doctor alone is responsible for the care of the patient; that, except in the case of the grossest abuse, no one in the hospital has the right to interfere in the handling of the patient and that the hospital assumes but a minimum of the responsibility for his treatment. This is the natural result of the extension of the principles of private practice to the hospital. The doctor, of course, is interested in keeping his patients and in obtaining his fee and looks upon any infringement of this privilege as an assault upon his prerogatives and upon his income.

"The 'service' in a public hospital usually has developed a certain morale and certain standards to which all of its members conform. This group morale and pride in the service, which redounds to the benefit of a ward patient, is lacking in the case of a private patient. The treatment which such a patient receives depends solely upon the individual conscientiousness of the doctor concerned. As a result, some private patients receive the best of care and others are grossly neglected. It is not uncommon for a busy surgeon to lose interest in a patient immediately after an operation and to leave the post-operative care to the house staff. Similar lack of care is often seen in medical cases, particularly if they are chronic and uninteresting.

"The second factor is that in the case of private patients each consultant receives his own fee and many laboratory or technical procedures involve an added expense. As a consequence, a conscientious physician will hesitate to use the consultant and laboratory and x-ray facilities of a hospital unless absolutely necessary, because he knows what a drain it is upon the purse of the sick. Moreover, such consultant fees are not at all regulated and often reach excessive amounts. As a result of these factors, the private patient either is deprived of the benefit of several opinions, or else is put to very great expense.

Ward Staff Better Than Private

"Finally, the resident staff in a private pavilion is rarely as good as that on the wards. The reason for this again lies in the fact that the private patients are the property of their respective physicians and that the resident doctors have practically no initiative in the treatment of the patients. Very often they are not allowed to perform a physical examination on the patient and are restricted to carrying out the orders of the visiting physicians. Consequently, the opportunities for learning are very limited and the best men will not accept these positions.

"This development of the private pavilion has come about owing to the demands of the visiting staffs for hospital facilities for their private patients and to the desire of the hospital to provide an additional source of income toward the support of the ward service. Between these two moving causes the interests of the private patient himself have been relegated to the background.

"What, then, should be our remedy for this state of affairs? A general hospital, which takes pride in its work and which maintains high standards in the wards, should have no interest in maintaining a private hotel, in which doctors may treat patients in a manner that does not conform to the standards of the hospital. Such enterprises may be left to private commercial organizations, and even over these the state may some day find it advisable to exert some control. In its private pavilion a general hospital should perfect some organization which will enable the members of its staff to treat the wealthier patients and at the same time will exert the same degree of control and supervision over their work that exists on the wards. The details of such a plan would require considerable study.

Must Supplement "Minimum Standards"

"Some steps, of course, have already been taken to correct the evils bound up with the present private hospital system. Chief among these is the minimum standard of the American College of Surgeons. This, however, is inadequate, particularly in the larger institutions. Staff conferences, the improvement of the clinical records, the flat rate fee for laboratory examinations are all steps in the right direction. It is simple, however, for an institution to comply with the letter of the minimum standard, without experiencing a fundamental change of heart, and I fear that this is too often the case.

"When a private hospital is conducted as an 'open hospital' with a courtesy staff, proper control of the work of the physicians becomes especially difficult. A courtesy staff is usually provided for in institutions whose regular staff is unable to keep the private beds filled. There arises, therefore, an economic pressure on the institution to retain on its courtesy staff physicians with large practices, irrespective of their qualifications.

"Hospitals will have to realize that private beds may properly be income producers only after the highest standards of service to the patients have been satisfied, and that the professional care of private patients is just as important as the hotel service provided by the institution. A scheme will have to be devised that goes beyond the minimum standard of the American College of Surgeons and that provides an effectual control of the professional work of the hospital.

"In the case of institutions devoted to the care of patients suffering from chronic diseases, the only satisfactory solution will be the assumption by the hospital of complete responsibility for the professional care of the patients by organization along sanatorium lines."

Care of Sick is Government Duty

Ralph Perkins, director of public welfare of the city of Cleveland, is a firm advocate of municipal hospitals and believes that public hospitals should attempt to render service to all classes of patients. Mr. Perkins writes:

"I take as a premise that the care of the sick is the duty of the commonwealth and that the smallest governmental unit that has enough patients to fill a hospital of an adequate size should operate the hospital. In other words, a city that would ordinarily have 150 patients should operate its own hospital. Counties in which there are no cities of this size should operate hospitals. The main reason this plan is not in effect now is because a great many cities on account of limiting tax laws have not had funds available for operating hospitals. This has resulted in private enterprises growing up which have taken over the public officials' responsibility.

"Another practice has been to take publicly owned hospitals out of the so-called 'politics' by turning them over to a board. While this practice may benefit the hospital, I believe it is thoroughly un-American and has a tendency to further the greatest weakness of our electorate, namely, lack of interest in choosing good officials and the failure to demand that public work be efficiently and properly accomplished. In other words, I do not believe we will ever have clean politics until we put things like hospitals, boards of health, orphanages and other institutions, that have a direct appeal to the interest and hearts of the people, into politics and then demand that they be properly run.

"To those who say this is impossible, I would call attention to the average judge of the probate court. He is an elected official and ordinarily is a man whose character and motives are beyond question. Party politics has been taught that the best policy is not to interfere with the man who handles the property of widows and orphans. Why shouldn't the commissioner of hospitals or health enjoy the same freedom and continuity of service?

Public Hospital Should Serve All

"If you will accept this premise, it is only logical that every large municipality should have a hospital equipped to give every service and, if possible, be the teaching center of the community. To accomplish this will take time and a great amount of education and until then, the private hospitals will have to supplement this public work, but let the people who are asked to subscribe to funds for building and operating these private hospitals remember that every effort should first be made to get the public to take on its responsibility. Naturally it is more difficult to get a community to vote funds for a hospital if the sick are already being taken care of by private enterprises.

"The first question this argument would call forth would be: 'How about the patient who can and is willing to pay for hospital care?' My answer would be that the public hospital should attempt to render service that would satisfy all classes and charge those who can afford to pay.

"I do not maintain that there is no place for the private hospital. I do not think, however, that it should be run on a commercial basis."

PUBLIC HEALTH IN THE 67TH CONGRESS

By JAMES A. TOBEY, M.S., LL.B., Administrative Secretary, National Health Council, New York.

THE Sixty-seventh Congress which recently adjourned was said to have made history in a number of respects. This Congress was the first which has ever held four sessions, it had the first woman senator, it gave birth to the bloc movement, and did a number of other striking things which have been sufficiently enumerated in the public press. This Congress added nearly a thousand new laws to the statute books, but only about 3 per cent of this number dealt with public health.

Here, then, was a real opportunity for it to have made worth-while history by giving adequate attention to the nation's health, an opportunity which was passed by. Congress convened in a special session on April 11, 1921 and adjourned on March 4, 1923. During this period it was in almost continual session except for short recesses from time to time. In the four sessions, over 21,000 bills and resolutions were introduced in both branches of Congress although, of course, many of these were duplicates. Of these bills 16,700 originated in the House and 5,419 in the Senate. Of this number 931 became laws and of these 276 were of a private character, so that 655 public laws were the result of the efforts of Congress.

In order to supply sanitarians with prompt, accurate and impartial information on the public health measures before Congress, the National Health Council decided soon after it began operations in January, 1921, to issue biweekly bulletins on national health legislation. During the Sixty-seventh Congress, 45 such bulletins were issued from the Washington Office. They has listed approximately 350 bills as being of direct interest to sanitarians. This number, however, represents only between one and two per cent of all the measures which were before Congress. Of the 931 laws, which were placed on the statute books, 31 not including appropriation bills, have a direct bearing on public health and even some of these are local in character. Thus, only 3.3 per cent of the laws passed by Congress in the course of nearly two years have dealt with this important subject.

Some Health Bills Which Passed

The health bills which did pass include the following public laws:

No. 47. *Veteran's Bureau created.* August 9, 1921. (H. R. 6611)

No. 51. *Packers' Act.* Regulating interstate and foreign commerce in live stock and dairy products. (H. R. 6320)

No. 74. *Cincinnati Health Exposition.* Cancellation stamp for. October 10, 1921. (H. R. 8365)

No. 78. *Veterans in Hospitals,* tobacco for. October 14, 1921. (S. 1718)

No. 96. *Anti-Beer act,* supplement to national prohibition law. Nov. 23, 1921 (H. R. 7294)

No. 97. *Maternity and Infancy,* promotion of welfare of (Sheppard-Towner Law), November 23, 1921. (S. 1039)

No. 110. *Searcy Hospital* for colored insane in Alabama, land for, November 5, 1921. (H. R. 6961)

No. 125. *Water supply* for Fort Monroe. (H. R. 7204)

No. 129. *Medical and surgical supplies* transferred by Army to Russian relief. (S. 2708) January 19, 1922.

No. 194, 216, and 273, *Hospitals for Veterans.* (H. R. 10864, H. R. 11547, H. R. 11588, resp.) April 14, 1922, May, 1922, July 1, 1922.

No. 225. *Pay* of Army, Navy, Public Health Service, etc. (H. R. 10972) June 7, 1922.

No. 227. *Narcotics* prohibited from importation or exportation except for medicinal purposes. (H. R. 2193), May 26, 1922.

No. 318. *Tariff* act. (H. R. 7456), September 21, 1922.

No. 330. *Leprosy* station in Hawaii. (H. R. 11589) June 19, 1922.

No. 347. *Coal* commission. (H. R. 12377)

No. 352 *Fees,* surgeons of Pension Bureau. (S. 3540), September 22, 1922.

No. 430. *Federal Leprosarium,* additional buildings for. February, 1923. (S. 3721)

No. 460. *War Risk Insurance,* amendment concerning. March 2, 1923. (H. R. 10003)

No. 463. *Hospital* in Arkansas, transfer. March 2, 1923. (H. R. 12751)

No. 472. *Sewage* drain at Miami, Fla. March 2, 1923. (H. R. 13272)

No. 513. *Filled Milk,* prohibition of in interstate commerce. March 3, 1923. (H. R. 13272)

No. 516. *Reclassification* of government positions and salaries. March 3, 1923. (H. R. 8928)

No. 519. *Butter,* standard for. March 3, 1921. (H. R. 12052)

No. 536. *Compensation* for injured government employes. March 3, 1923. (H. R. 14222)

No. 542. *War Risk Insurance,* amendment concerning. March 3, 1923. (H. R. 14401)

The following public resolutions were enacted:

No. 63. *Veteran's Bureau*, disposal of articles produced by patients of. (H. J. Res. 313)

No. 65. *Pollution of Navigable Waters*, convention. (H. J. Res. 297) August, 1922.

No. 75. *Water supply* of Kansas City, Mo., and Kan. (S. J. Res. 216)

No. 96. *Narcotic control*, international cooperation in. March 2, 1923. (H. J. Res. 453)

While it is difficult to select the most important of these laws, there are a number which stand out as of real influence on national health. These include the Maternity and Infancy Law, popularly known as the Sheppard-Towner act, the filled milk law, the hospitalization for veterans, the narcotic act, the anti-beer legislation, and the measures which serve to increase the pay of government health workers. The federal maternity and infancy act which became a law in November, 1921, has already been contested and is before the United States supreme court for a decision as to its constitutionality. This cause was brought by the commonwealth of Massachusetts in accordance with a legislative resolution. Another suit was brought in the courts of the District of Columbia by a citizen of the state of Massachusetts but both the supreme court and court of appeals of the district have upheld the law and the case has been appealed direct to the United States supreme court where it will be tried with the one now pending.

43 States Accept Sheppard-Towner Aid

The Sheppard-Towner act authorizes an appropriation of $480,000 for the fiscal year ending June 30, 1922 and $240,000 annually for five years thereafter to be apportioned equally among the states. In addition, an appropriation of $1,000,000 for the fiscal year 1922 and a like annual sum for five years are authorized. This latter amount is to be apportioned $5,000 to each state and the balance according to population. In order to receive this sum, the state must appropriate an equal amount. The state must also accept the provisions of the act, authorize a state agency to administer it, and submit detailed plans, which must be approved by a federal board of maternity and infant hygiene before the grant will be made to the state. The children's bureau of the department of labor is charged with the administration of the act and is given not to exceed 5 per cent of the appropriation for such purposes. A certificate of allotment of money to a state may be withheld by the children's bureau, with the approval of the board, but the state agency may appeal directly to the president. The board is made up of the chief of the children's bureau, the surgeon general of the United States Public Health Service, and the United States commissioner of education. Already thirty-nine states have accepted the act by legislative enactment and legislation is pending in three others. Maine, Massachusetts, Louisiana, New York, Rhode Island and Vermont refused to accept the act.

The so-called "filled milk" law would prohibit the shipment in interstate commerce of filled milk, which is described as an adulterated article of food and injurious to public health, the sale of which constitutes a fraud on the public. This filled milk is further described to be any milk, cream, or skimmed milk, whether or not condensed, evaporated, concentrated, powdered, dried or dessicated, to which has been added or blended any fat or oil other than milk fat. The law does, however, exempt certain products which are prescribed for infant feeding by a physician. At the hearings on this bill there was a good deal of conflicting testimony as to the nutritive value of filled milk, some eminent scientists holding that it was lacking in vitamines, while others asserted with equal assurance that it was wholesome and nutritious. The law does not, of course, affect the sale of such filled milk within a state, but already a number of states, including Utah, Maryland, Florida, California, Colorado, Connecticut, and Oregon have laws either suppressing it or making the sale of it impractical, and similar laws are pending before the legislatures of other states.

The narcotic law (No. 227) amends the existing law and creates a federal narcotics control board, to be composed of the secretary of state, secretary of the treasury, and the secretary of commerce. This board shall determine the amount of crude opium and coca leaves which may be imported into this country for medicinal purposes. It is made unlawful to bring these drugs in except for these reasons and the law imposes a fine of not more than $5,000 and imprisonment for not over ten years for conviction of the offense and also sets out methods of seizure and procedure when drugs are imported. Another law regarding narcotics was the resolution requesting the president to urge upon the governments of certain nations the necessity for limiting immediately the production of habit-forming narcotic drugs and the raw materials from which they are made, to the amount actually required for strictly scientific purposes.

Veterans' Bureau to Spend $475,000,000 This Year

The United States Veterans' Bureau was created during the first session of the Sixty-seventh Congress and served to coordinate all medical activities undertaken on behalf of ex-service men. During this calendar year the bureau will disburse the stupendous sum of $475,000,000. A number of appropriations for hospitals for veterans were passed, including one of $17,000,000 which is in addition to the $18,000,000 provided by the Sixty-sixth Congress.

The pay of officers of the Army, Navy and Public Health Service was materially increased by a law which was signed in June, 1922, while the salaries of other government sanitarians will be affected by the reclassification law, which passed during the last days of the fourth session. The Senate held the reclassification bill for fourteen months after the House passed it, and then completely rewrote the bill. Rather than lose the reclassification entirely, the House concurred in the Senate amendments. Most sanitarians would come under the professional services in which annual salaries range from $1,860 to $7,500, and $900 to $3,000, respectively. This law goes into operation on July 1, 1924.

$650,000 Appropriation for Leprosarium

The control of leprosy was given greater facilities by the passage of the act appropriating $650,000 for new buildings for the federal leprosarium at Carville, La. The tariff act of 1922 contained a number of items of interest to sanitarians, principally with regard to duties on chemicals and drugs. The so-called anti-beer act, which prohibited prescription of beer by physicians aroused much comment and opposition from the medical profession but became a law, nevertheless. The act authorizing the president to call a convention of maritime nations to consider pollution of waters by oil should result in a diminution of this nuisance. Most of the other health legislation which was passed was not of great importance to the nation as a whole as will be seen from the list of these laws given previously.

Since only 31 health bills became laws, about 320 failed of passage. Many of these were minor measures and some of them "freak" ones, and a large number never got

out of committee. Among the more important bills which did not pass may be mentioned: the resolutions to amend the constitution relative to restriction of child labor: transfer of the activities of the interdepartmental social hygiene board to the department of justice: the Fess-Capper bill for federal aid to physical education: commissions for sanitary engineers in the U. S. Public Health Service; reorganization of the U. S. Public Health Service; the uniform marriage and divorce bill; sale of Marine Hospital at Detroit; a number of bills relating to tuberculosis; and a couple of anti-vivisection measures. The District of Columbia, for which Congress legislates, fared particularly badly with respect to health measures, as bills to regulate milk, venereal diseases, optometry, and child welfare were unacted upon.

Department of Education and Welfare Proposed

A plan for reorganization of the federal executive departments was submitted to Congress by the president on February 15, though no bill was introduced and no action taken. The principal matter of interest to sanitarians is, of course, the proposed new department of education and welfare.

Existing bureaus which would be transferred to this department of welfare are as follows:

(a) From the Department of the Interior—
Bureau of Education.
Indian Schools.
Howard University.
St. Elizabeth's Hospital.
Freedmen's Hospital.
Bureau of Pensions.

(b) From the Department of Labor—
Women's Bureau.
Children's Bureau.

(c) From the Treasury Department—
U. S. Public Health Service.

(d) From the War Department—
Soldiers' Home.

(e) From the Department of Justice—
Office of Superintendent of Prisons.

(f) From Independent Establishments—
Smithsonian Institution.
Federal Board of Vocational Education.
National Home of Disabled Volunteer Soldiers.
Columbian Institution for the Deaf, Veteran's Bureau.

The department would have four divisions, namely: health, education, social service and veteran relief, each under an assistant secretary. Other recommendations of general interest include the combining of the War and Navy departments into a new Department of National Defense; transfer of public works activities from War and Navy to other departments, chiefly the Interior; change of name of Post Office Department to Department of Communications; and removal of non-fiscal services from the Treasury Departments.

The Sixty-eight Congress will convene the first Monday in December of 1923, provided no special session is called in the meantime. It is said that the president, having undergone the Sixty-seventh Congress, has no desire to assemble the Sixty-eighth before its time. This latter body will have the usual opportunity to pass much needed health legislation. Whether it will take the usual course and pass over most of it, or take an unusual course and pass it, remains to be seen.

From the sunlit heights of life the deep vales and hollows of its necessities look darkest, but to the faithful whose part lies there, there is still light enough to show the way, and to no other eyes do the everlasting hills and blue heaven seem so brilliant.—James Martineau.

NATIONAL HOSPITAL DAY A SUCCESS

More than 5,000 hospitals of the United States and Canada took an active part in the observance of the third annual National Hospital Day held May 12. The widespread observance of the day far exceeded the expectations of the National Hospital Day Committee.

One of the interesting features of this year's activities was the extensive part the radio played in calling the attention of people to this day and in inviting them to visit a hospital. A special National Hospital Day message was broadcasted from thirty government stations throughout the country. This service was made possible through Surgeon General Cumming of the Public Health Service, a member of the committee.

The message, which was received throughout the United States and a large portion of Canada, stated the various services which hospitals afford, and emphasized the importance which Uncle Sam placed upon this day in departing from his unusual radio schedule and devoting his time to cooperating with the National Hospital Day Committee. The message was translated into seventeen foreign languages for distribution among the newspapers and magazines to call the attention of all readers to the observance of National Hospital Day.

Two of the large radio stations of Chicago also prepared special programs for the day. A group of nurses from the Florence Nightingale chorus of the Presbyterian Hospital School of Nursing, under the direction of John W. Norton, Robert R. Burch, and Miss Mary H. Cutler of the school, sang four songs which were broadcasted by KYW and were heard from the Arctic Circle to the Panama Canal and far out on the Atlantic and Pacific oceans.

Hundreds of hospitals which have radio stations tuned in on this program for the entertainment of hospital visitors. An informative talk by E. S. Gilmore, superintendent of Wesley Memorial Hospital, Chicago, and chairman of the National Hospital Day Committee, was also a part of the Saturday afternoon program. The radio was also used on the preceding evening when Matthew O. Foley, executive secretary of the committee, broadcasted an invitation to the people of the United States to visit a hospital the next day. This message was sent from Station WMAQ.

Many interesting features such as graduation exercises for nurses, baby shows, exhibitions of equipment, and various departments of hospitals, were carried on to a larger extent than ever before. Many hospitals issued pamphlets or booklets telling their communities something of their services and needs.

A unique program was given at Tacoma General Hospital. A birth certificate containing the footprints of the child was given to every baby who had been born in that hospital and who visited the hospital May 12. This was done through the efforts of C. J. Cummings, superintendent, and a member of the National Hospital Day Committee.

The success of the third National Hospital Day is largely due to the cooperation of various hospital associations, national and sectional, government officials, churches and the press, all of which cooperated in doing publicity work of some sort for the day. The lieutenant governors of every Canadian province and governors of practically every state in the United States materially assisted in the plans for the day by sending out official proclamations. Courtesies were also extended in many ways, as in the case of Governor Hunt of Arizona through whom flowers were sent to every hospital in the state having as patients, ex-service men.

THE SOUL OF MEDICINE*

By RUDYARD KIPLING

It is refreshing for those who are closely occupied with a great work to have a birds'-eye of what they are doing painted by one engaged in another occupation. When such a summation is made by a master hand at description, it is an inspiration. The address, given by Mr. Rudyard Kipling before the Royal College of Surgeons on the occasion of the Hunterian Festival in celebration of the birthday of John Hunter on February 14, marks an epoch in medicine. Not only is it one of the finest pieces of literature in any language, it is also a crystallization of the soul of our profession. It should be read by every physician, every hospital executive, every nurse and every searcher after truth. To that end it is herewith reproduced from the *Lancet* of February 24, 1923.—EDITOR'S NOTE.

IN THE oration to which we have listened this afternoon, Sir John Bland-Sutton touched on that noble verse in Ecclesiasticus: "Honor the Physician with the honor which is due to him for the uses which ye may have of him." There is an alternative reading, which runs, "Honor a Physician before thou hast need of him." It is also seemly to honor him after that event. And I have not another justification, but an excuse, for speaking in such an assembly as this. I am, by calling, a dealer in words, and words are, of course, the most powerful drug used by mankind. Not only do words infect, ergotise, narcotise, and paralyze, but they enter into and color the minutest cells of the brain, very much as madder mixed with a stag's food at the zoo colors the growth of the animal's antlers. Moreover, in the case of the human animal, that acquired tint, or taint, is transmissible.

There is a legend which has been transmitted to us from the remotest ages. It has entered into many brains and colored not a few creeds. It is this: Once upon a time, or rather, at the very birth of time, when the Gods were so new that they had no names, and Man was still damp from the clay of the pit whence he had been digged, Man claimed that he, too, was some sort of a deity. The Gods were as just in those days as they are now. They weighed his evidence and decided that Man's claim was good—that he was, in effect, a divinity, and, as such, entitled to be freed from the trammels of mere brute instinct, to enjoy the consequence of his own acts. But the Gods sell everything at a price. Having conceded Man's claim, the legend goes that they came by stealth and stole away this godhead, with intent to hide it where Man should never find it again. But this was none too easy. If they hid it anywhere on Earth, the Gods foresaw that Man, the inveterate hunter—the father, you might say, of all hunters—would leave no stone unturned or wave unplumbed till he had recovered it. If they concealed it among themselves, they feared that Man might in the end batter his way up even to the skies. And, while they were all thus at a stand, the wisest of the Gods, who afterwards became the God Brahm, said, "I know. Give it to me!" And he closed his hand upon the tiny unstable light of Man's stolen godhead, and when that great hand opened again, the light was gone. "All is well," said Brahm. "I have hidden it where Man will never dream of looking for it. I have hidden it inside Man himself." "Yes, but whereabouts inside Man have you hidden it?" all the other Gods asked. "Ah," said Brahm, "that is my secret, and always will be unless and until Man discovers it for himself.

Thus, then, gentlemen, does the case stand with Man up to the present. Consider, for a moment, the pathos of the poor brute's position. You all know the common formula for him. "Born of woman, on Woman designed to beget his life—the natural quarry of the Seven Deadly Sins, but the altar of an inextinguishable Hope." Or, more scientifically (I regret I am not a scientific person), he might be defined as "An imperfectly denatured animal intermittently subject to the unpredictable reactions of an unlocated spiritual area."

And it is just this search for this unlocated spiritual area, whether it be a growth or a survival, which has preoccupied Man from that day to this. The priest and the lawgiver have probed and fished for it all through the ages; but, more than any other, through all the ages, the leech, the medicine-man, the healer, has been hottest on its track. He has searched wherever he dared—openly or furtively—in safety or at the risk of his life. In the early days the Astrologer-Physician, as he called himself, dreamed that the secret of Man's eternal unrest was laid up in the sun, moon and stars; and consequently, since all created things were one in essence, that an universal medicament for Man's eternal woes would be discovered upon earth. So he searched the earth and the heavens for those twin secrets, and sacrificed himself in the search as a matter of course. Later, when the embargoes on the healing art were lifted, when, at last, he was permitted to look up only into the bodies of mankind, the nature of his dreams changed for a while. He had found more wonders beneath his knife than earth or the planets had heretofore shown him. And that was barely ten generations ago. Once again, the surgeon, as he had become, renewed his search, and once again sacrificed himself in the search as his passion drove him. There is no anesthesia so complete as man's absorption in his own job.

In the teeth of the outrageous, the absurd disabilities imposed on him, Man, the imperfectly denatured animal, who cannot trust the evidence of his own senses in the simplest matter of fact; whose evidence on the simplest matter is colored by his own iniquities; Man, always the hunter, went up against the darkness that cloaked him and every act of his being, to find out what order of created being he might be. He called it scientific research. It was the old quest under a new name. But, this time, the seekers who headed it, unlike the priest and the lawyer, admitted that they knew very little. Experience had taught them to be humble. For that reason their knowledge was increased. They moved forward into areas of the body, which, till then, had denied themselves to Man's hand. They were turned back, without explanation, from other areas which, as yet would tolerate no spying. They were bewildered by mysteries which under some new marriages of observation upon accident, or some predestined slip of the knife, resolved into—mysteries profounder still! Is it any wonder that the old dreams come back? The dream of the essential unity of all created things—the dream that some day that which men called life might be led into matter which men called dead—the boldest dream of all, that eventually Man might surprise the ultimate secret of his being where Brahm had hidden it, in the body of Man. And, meanwhile, their days were filled, as

*An address given by Mr. Kipling before the Royal College of Surgeons, London, on February 14, 1923.

yours are filled, with the piteous procession of men and women begging them, as men and women beg of you daily, for leave to be allowed to live a little longer, upon whatever terms.

Is it any wonder, gentlemen of the College of Surgeons, that your calling should exact the utmost that man can give—full knowledge, exquisite judgment and skill in the highest, to be put forth, not at any self-chosen moment, but daily at the need of others? More than this. Your dread art demands the instant, impersonal vision which in one breath, one beat of the pulse, can automatically dismiss every preconceived idea and impression, and as automatically recognize, accept, and overcome whatever of new and unsuspected menace may have slid into the light beneath your steadfast hand.

But such virtue is not reached or maintained except by a life's labor, a life's single-minded devotion. Its reward is not only the knowledge of mastery and the gratitude of the layman, which may or may not bring content. Its true reward is the dearly-prized, because unpurchasable, acknowledgement of one's fellow craftsmen.

RECENT HOSPITAL DECISIONS

By DOROTHY KETCHAM, Ann Arbor, Mich.

Endowed Hospital Declared Tax-Exempt

The question of exempting from taxation hospital property was raised before the supreme court of Vermont, March 1, 1923. Suit was brought by the St. Albans Hospital and another to restrain the town of Enosburg and others from assessing and collecting taxes. It was claimed that the institution is charitable in character and as such is by law exempt from taxation. The institution involved is endowed, holding property through trustees to whom the property was donated or otherwise granted in trust for its charitable use and support. The plaintiff hospital devotes all income from its trust property to receiving and caring for indigent, old and infirm patients without pay; this income is insufficient and large sums have to be raised each year for its support, a portion of which is paid by patients or inmates of the institution. The taxes were levied by the municipalities for 1918, 1919 and 1920, the demurrer claiming first that on facts alleged the institution was not charitable in character within G.L.687 and also that, if it is, the lands and buildings situated outside the city of St. Albans are not exempt from taxation.

By G. L. 684 subd. 6, real and personal estate granted, sequestered or used for public, pious or charitable uses is exempt from taxation. The exemption is not to include lands or buildings owned or kept other than "home or hospital, lands adjacent to such edifice . . . and used as a lawn, playground or garden, and the so-called glebe lands; . . . but the lands or buildings exclusively used for the support of orphanages, homes or hospitals which, without pay, receive and care for indigent, old or infirm patients or inmates shall be exempt from taxation, when such lands or buildings are located in the town in which such institutions are situated."

The defendants in the case assumed that the exemption of hospitals is restricted to "such institutions as receive and care for indigent, old or infirm patients or inmates without pay." The plaintiff claims that it relates only to homes and hospitals owned by religious societies. The first contention was set aside "it being made to appear that the property sought to be taxed was 'granted' and is being used for charitable purposes."

The defendants assumed that the phrase "but the lands or buildings exclusively used for the support of orphanages, homes, asylums or hospitals, etc., shall be exempt" was intended as a restriction of the general exemption accorded. The court traces the history of the section. The first legislation touching the exemption of property devoted to pious or charitable uses was enacted in 1904. Homes and hospitals not maintained by religious societies were left untouched by the amendment. "As the matter then stood the exemption of real and personal estate granted, sequestered, or used for public, pious and charitable uses was restricted by excluding therefrom the property of railroad corporations and the lands and buildings owned and kept by religious societies except certain specified properties which included "lands or buildings exclusively used for the support of orphanages, homes, asylums or hospitals of a strictly charitable character."

The only subsequent amendment affecting the status of exemptions was enacted in 1917 Act. No. 40 when the terms "orphanage, home or hospital" were inserted after "convent or school" in the part governing the exemption of buildings or lands owned or kept by a religious society." This extended the exemption to buildings owned or kept by a religious society and used as an orphanage, home or hospital, and adjacent lands used as a lawn, playground or garden. There was added also, "when such lands or buildings are located in the town in which such institutions are situated." The effect of this latter clause was to narrow the scope of the proviso but the effect of the provision was unchanged. "It is not readily conceivable that the legislature intended by this amendment to reverse the settled policy of the state of more than a century's duration respecting the taxation of property devoted to charitable uses, and by implication merely provide for the taxation of such property. If such had been its intention, more appropriate language to effect the change would naturally have been employed." It follows that the plaintiff's right of exemption from taxation was unaffected according to the court.—*St. Albans Hospital vs. Enosburg, 120 Atl. 97.*

State Hospital Held Not Liable

The Central State Hospital for the Insane has been held by the court of appeals of Kentucky, February 20, 1923 to be a state institution and as such not liable for the negligent acts of its officers, agents and servants which result in injury to the person of another. The appellant in this case was injured when the automobile in which she was riding collided with a railroad coal car which the agents and servants of the hospital were pushing on to the grounds of the asylum. The other points in the case will not be raised here. The court pointed out that as the Central State Hospital "exercises part of the sovereign functions of the state government, it cannot be made liable in an action for tort, as the state can do no wrong, neither can its servants do wrong for it, or in its name, so as to make it liable in such cases . . . clearly the appellant could not maintain an action for personal injury against the Central State Hospital, a state institution, for the injury occasioned to her through the

negligence of its employes, if any, in operating an electric motor truck in the regular line of their employment. She might, however, have had and maintained an action against the employes of the asylum operating the electric motor if their negligence was the proximate cause of her injury."—*Dunn vs. Central State Hospital, 218 SW 216.*

Ousted Trustee Recovers Salary

A private institution was originated and incorporated for profit, there being three stockholders who were also the officers and directors. There was but one meeting of the stockholders or directors and at that time the officers were assigned for one year, or until successors were to be elected. The salaries were fixed at this meeting and were made payable at the expiration of the yearly term of office. The work of the institution was started and the formality of directors' meetings done away with. After about six months the plaintiff claims he was practically ousted from his office of vice president and treasurer by the president and secretary, they being the only other directors. He then sold his stock and resigned which was accepted. He brought suit for his salary for the portion of the year which had elapsed prior to the severance of his connection with the corporation. The court of errors and appeals of New Jersey, January 19, 1923 held that he was entitled to recover from the corporation the portion of his salary appropriate to the time during which he performed his official duties.—*Frankle vs. Lincoln Private Hospital, 119 Atl. 674.*

TWO HUNDRED FIFTY BOOKS FOR WARD PATIENTS

By ELIZABETH GREEN, Former Librarian, and ELEANOR R. GIFFORD, Volunteer Worker, Barnes Hospital Library, St. Louis, Mo.

THE relief to patients from the tedium of a hospital experience through reading is acknowledged. The hospital library is recognized as a factor for good by the hospital that has one. Libraries are open to all hospitals if started on a small scale.

Books are easily secured through donations, and book distribution by volunteer workers is practical, provided the librarian, who may be an employe engaged in other hospital work or an interested board member, supervises the work. Such a method has proved successful in the Barnes Hospital, St. Louis, Mo., and has been in operation since 1915, with so small a cost that it is negligible.

The following list represents the kinds of books desired and requested by the ward patients of the free or part-pay type. They are the first persons to consider when establishing a hospital library as they are the ones usually unprovided with reading matter.

Our experience has demonstrated several points that may be useful to other hospitals in the selection of books interesting to ward patients of a limited literary background.

1. The number and kind of books required in a hospital library depend more on the rapidity of the turn-over of patients than the bed capacity of a hospital. For example, a government reconstruction hospital would need a greater number of books including more subjects than a general hospital, such as the Barnes, which has an average fifteen-day turn-over of patients.

2. All books read by patients, especially those confined to bed, should have large type, and should be printed on light weight, non-transparent, unglazed paper. This is important for conservation of both sight and strength, and should be considered in assembling a hospital library.

3. Foreign language books representing the nationalities admitted to the hospital should be in the library. No patient should be deprived of the pleasure of reading through inability to read English.

4. Non-fiction is wanted only occasionally. The Bible or Bible stories; travel with adventure; poetry, such as Longfellow's; entertaining nature articles; and short biographies about well known and popular people, are about the only types of non-fiction enjoyed. A sick person wants and needs to make less effort to concentrate than a well person; therefore his standard of reading is as a rule a little below normal.

5. Stories with uncomplicated plots that are not too long are liked best. Women like simple love stories with a happy ending,—the more improbable the better. Men like stories that move rapidly, as well as detective, mystery and humorous stories.

6. For the inland hospital there is no call for sea stories, although they may go well on the coast. Medieval tales or stories laid in foreign countries where the characters belong to classes of society unfamiliar to the ward patients are not enjoyed.

An active hospital library performs a real social service in contributing to the entertainment and contentment of patients. Social service has become an important factor in the hospital of today. The time is ripe for the library to play its part in hospital life, and since the Barnes Hospital has proved that a hospital library can be developed and maintained with practically no cost, is it not possible for almost any hospital to put the boon of reading within the reach of its patients?

The 250 Books

Abbot, E. H.	Molly Make-Believe
Adams, S. H.	Wanted a Husband
Alcott, L. M.	Eight Cousins
	Jack and Jill
	Jo's Boys
	Little Men
	Little Women
	An Old Fashioned Girl
	Rose in Bloom
	Under the Lilacs
Barclay, F. L.	The Following of the Star
	Through the Postern Gate
	The Rosary
Barr, A. E.	Joan
Bartlett, F. O.	Joan and Co.
Beach, Rex E.	The Barrier
	The Crimson Gardenia
	Flowing Gold
	Going Some
	The Heart of the Sunset
	The Iron Trail
	The Ne'er-Do-Well
	"Pardners"
	The Silver Hoard
	The Spoilers
Beebe, W.	Jungle Peace
Bosher, K. L.	The House of Happiness
	How It Happened
	Kitty Canary
	Mary Cary
	Miss Gibbie Gault
Brainerd, Eleanor	Our Little Old Lady
Brand, Max	"Trailin' "
	The Untamed
Buckrose, Mrs. J. E.	Because of Jane
	Down Our Street
	Gay Morning
	The Gossip Shop
	The House of the Golden Windows
	Love in a Little Town
	Marriage While You Wait
	The Matchmakers
	Young Hearts

Burnett, Mrs. F. H. — Editha's Burglar
Little Lord Fauntleroy
Burnham, Clara Louise — Clever Betsy
The Inner Flame
Next Door
Sweet Clover
Burroughs, E. R. — Beasts of Tarzan
Jungle Tales of Tarzan
The Return of Tarzan
Tarzan and the Golden Lion
Tarzan and the Jewels of Opar
Tarzan of the Apes
Tarzan the Terrible
Tarzan the Untamed
Butler, Ellis P. — Mike Flannery
Pigs is Pigs
Swatty
Calhoun, F. B. — Miss Minerva and William Green Hill
Carey, R. N. — Not Like Other Girls
Churchill, Winston — The Inside of the Cup
Clemens, S. L. (Mark Twain) — The Adventures of Huckleberry Finn
The Adventures of Tom Sawyer
Life on the Mississippi
Cobb, Irvin S. — The Life of the Party
Old Judge Priest
Speaking of Operations
Connor, Ralph — The Man from Glengarry
The Prospector
Curwood, J. O. — The Courage of Marge Doone
The Flaming Forest
River's End
The Valley of Silent Men
Daviess, M. T. — Andrew the Glad
The Melting of Molly
Miss Selina Lue
The Road to Providence
The Tinder Box
Davis, R. H. — In the Fog
White Mice
Donnell, A. H. — Rebecca Mary
Doyle, A. C. — Adventures of Sherlock Holmes
The Doings of Raffles Haw, and Other Stories
His Last Bow
The Hound of the Baskervilles
The Lost World
Memoirs of Sherlock Holmes
The Sign of the Four
A Study in Scarlet
The Valley of Fear
Ferber, E. — Buttered-side Down
Dawn O'Hara
Fanny Herself
Roast-Beef Medium
Fletcher, J. S. — Dead Men's Money
The Herapath Property
The Lost Mr. Linthwaite
The Middle Temple Murder
The Orange-Yellow Diamond
Ford, P. L. — The Great K. and A. Train Robbery
Wanted a Chaperone
Ford, Sewall — Torchy
Torchy and Vee
Torchy as Pa
Trying Out Torchy
Forsslund, Louise (Mrs. L. Foster) — Old Lady 31
Foster, R. F. — Cab No. 44
Fox, John, Jr. — The Heart of the Hills
The Little Shepherd of Kingdom Come
The Trail of the Lonesome Pine
Green, A. K. — The Filigree Hall
The House in the Mist
Leavenworth Case
The Millionaire Baby
Mystery of the Hasty Arrow
Grenfell, W. J. — Adrift on an Ice-Pan
Down to the Sea
Grey, Zane — Desert Gold
The Heritage of the Desert
The Lone Star Ranger
The Man of the Forest
The Rainbow Trail
Riders of the Purple Sage
The Young Forester
The Young Pitcher
Haines, A. C. — Partners for Fair
Henry, O. — Cabbages and Kings
The Four Million
The Gentle Grafter
The Heart of the West
Options
The Roads of Destiny
Rolling Stones
Sixes and Sevens
Strictly Business
The Trimmed Lamp
The Voice of the City
Whirligigs
Hornung, E. W. — The Amateur Cracksman
The Camera Fiend
Raffles
Hueston, Ethel — Prudence of the Parsonage
Klickmann, E. — Home Art Crochet-Book
Lee, Jeanette — Aunt Jane
The Green Jacket
Mr. Achilles
The Other Susan
The Rain-Coat Girl
Lincoln, J. C. — Cap'n Eri
The Depot Master
London, Jack — Burning Daylight
Call of the Wild
Children of the Frost
Daughter of the Snows
The Game
The Scarlet Plague
The Valley of the Moon
White Fang
Longfellow, H. W. — Poems
Lothrop, H. M. — Adventures of Joel Pepper
Ben Pepper
Five Little Peppers and How They Grew
Five Little Peppers Midway
Phronsie Pepper
McGrath, Harold — The Goose Girl
The Man on the Box
The Yellow Typhoon
Maniates, Belle K. — Amarilly of Clothes-Line Alley
Marlitt, E. (Eugenia John) — Old Mam'selles Secret
The Second Wife
Martin, Mrs. G. (M.) — Smmy Lou
Miller, A. (Duer) — Come Out of the Kitchen
The Charm School
Nicholson, Meredith — Blacksheep! Blacksheep!
Oemler, M. C. — The Purple Heights
Slippy McGee
Onions, Mrs. Oliver (Ruck) — The Three of Hearts
Paine, A. B. — The Hollow Tree
Parrish, Randall — Keith of the Border
When Wilderness Was King
Porter, Beatrix — The Tale of Peter Rabbit
The Tale of Tom Kitten
Porter, Eleanor H. — Dawn
Just David
Mary Marie
Miss Billy
Miss Billy Married
Miss Billy's Decision
Oh Money! Money!
Pollyanna
Pollyanna Grows Up
The Road of Understanding
Sister Sue
Porter, Gene S. — At the Foot of the Rainbow
A Daughter of the Land
Freckles
The Girl of the Limberlost
The Harvester
Her Father's Daughter
Laddie
Michael O'Halloran
Richmond, G. S. — Red Pepper Burns
Red Pepper's Patients
The Twenty-fourth of June
Under the Country Sky
Rinehart, Mary Roberts — The Amazing Interlude
Bab, a Sub-Deb
The Circular Staircase
The Man in Lower Ten
More Tish
Tish
Twenty-three and a Half Hours' Leave
When a Man Marries
Where There's a Will
Shute, H. A. — "Brite" and Fair
Plupy: a Real Boy
The Real Diary of a Real Boy
Spearman, F. H. — Laramie Holds the Range
Whispering Smith
Stevenson, R. L. — The New Arabian Nights
Treasure Island
Stuck, Hudson — Ten Thousand Miles with a Dog Sled
Tarkington, B. — Penrod
Penrod and Sam
Seventeen
Thayer, L. — The Mystery of the 13th Floor
Vance, L. J. — The Black Bag
The Brass Bowl
The Lone Wolf
Webster, Jean — Daddy-Long-Legs
Dear Enemy
Weston, George — The Apple Tree Girl
White, Stewart Edward — Blazed Trail Stories
Wiggin, Kate Douglas — Rebecca of Sunnybrook Farm
Mother Carey's Chickens
Wilson, H. L. — Ruggles of Red Gap
Wister, Owen — Lady Baltimore
Lin McLean
Members of the Family
The Virginian
Wright, Harold Bell — The Calling of Dan Matthews
The Eyes of the World
Helen of the Old House
The Re-creation of Brian Kent
The Shepherd of the Hills
That Printer of Udells
Their Yesterdays
The Winning of Barbara Worth

The mind never unbends itself so agreeably as in the conversation of a well-chosen friend. There is indeed no blessing of life that is any way comparable to the enjoyment of a discreet and virtuous friend. It eases and unloads the mind, clears and improves the understanding, engenders thoughts and knowledge, animates virtue and good resolutions, soothes and allays the passions, and finds employment for most of the vacant hours of life.—Addison.

Those who live on the mountain have a longer day than those who live in the valley. Sometimes all we need to brighten our day is to rise a little higher.

NEW FEDERAL HOSPITAL AT MILWAUKEE IS OPENED

THE splendid new hospital recently erected at the Northwestern Branch of the National Home for Disabled Volunteer Soldiers at Milwaukee was opened officially on May 1. No ceremonies were connected with the opening of the doors other than at exactly 2 p. m. the contractor, H. Schmidt & Son of Milwaukee, delivered the keys of the building to Gov. Charles M. Pearsall and he in turn, tendered them to Gen. George H. Wood, Dayton, Ohio, president of the board of managers of the National Soldiers' Home Service. General Wood unlocked the front door of the administration building and admitted color bearers representing the local G. A. R., S. A. W. Veterans, and the American Legion who were accompanied by color bearers and guard.

More than 10,000 people were then admitted in groups of twenty and were escorted through the buildings by guides who had previously been instructed in the interesting features of the hospital. Prominent among the visiting guests were Gen. George H. Wood; Col. C. W. Wadsworth, general treasurer of the National Home Service; Col. James A. Mattison, chief surgeon; and Col. B. K. Cash, inspector general; Col. Edward Barret, national vice commander of the American Legion; Major Hoan of the city of Milwaukee, and many others. Col. Charles M. Pearsall as governor of the Northwestern Branch N. E. D. V. S., will have in charge all of the activities at this branch. The surgeon of this branch is Maj. Myron W. Snell and Maj. Benjamin E. Hedding will be the medical director of the tuberculosis hospital.

This hospital has been constructed to care for the tuberculous ex-service men of the eighth district and other nearby states. Some twenty-eight tuberculosis patients were receiving care at the general hospital at this branch and they were transferred to the new unit to constitute the first contingent of patients. Men to occupy this hospital are arriving in groups of about twenty-five per week since the opening.

The administration building is in the center of the building group and contains in addition to the executive offices the laboratories and treatment rooms; immediately behind is the service building containing the kitchen and mess hall, and eight fifty-one bed wards are immediately adjacent and connected by corridors. In addition to this group of buildings there is found on either end two ambulatory buildings which is a new departure in hospital construction and is made possible only because of the necessary requirement of land. By utilizing all of the available space for patients the capacity of this hospital in all departments will be 622. In addition to this quarters are available or are being made available for a personnel to take care of this group of patients consisting of about 300 and includes doctors, nurses, cooks, ward attendants, elevator operators, janitors, etc.; also housed in the main group of buildings is the theater for picture shows and radio concerts, and the occupational therapy department.

Men who have observed hospital construction, both civil and government, are very free in praising this new institution and believe that Milwaukee has had presented to it one of the country's finest monuments to perpetuate in memory the services of crippled survivors of not only the World War but of all other wars.

New Federal Hospital at Milwaukee which opened May 1. It is located at the Northwestern Branch of the National Home for Disabled Volunteer Soldiers.

AMERICAN MEDICAL COUNCIL APPROVES 643 HOSPITALS FOR INTERNSHIPS

A directory of hospitals approved for internships by the Council on Medical Education and Hospitals of the American Medical Association, revised to March 15, 1923, has just been published by the American Medical Association. It contains the names of 643 hospitals which offer 3,671 internships.

The directory is divided into three sections: the first lists general hospitals that are considered in a position to furnish acceptable internships for medical graduates; the second and third sections list those which offer opportunities for physicians who seek further openings along special directions. The second section includes state hospitals and hospitals for the insane, while the third, includes other special hospitals.

HOME ECONOMICS ASSOCIATION TO MEET IN CHICAGO IN JULY

The annual meeting of the American Home Economics Association will be held at the University of Chicago July 30 to August 3.

Fifty-five persons who are at present occupying some of the most prominent positions in the field of home economics are scheduled to appear in the program of this meeting. Many speakers from closely allied professions will also speak at the meeting.

We cannot be independent of the kindly give-and-take spirit of cooperation in our work.

THE INFORMATION DESK

THREE HOUSEKEEPING SUGGESTIONS

A trio of workable household hints are furnished by Miss S. Persis Johnston, R.N., superintendent of Brandon General Hospital, Brandon, Manitoba. Here they are:

Remains of cakes of toilet soap collected and placed in a jar and boiled down with the requisite amount of water make a very satisfactory soap jelly or solution for the preparation of enemata.

Large bags made of twine of coarse mesh make satisfactory receptacles in which small articles, such as wash cloths and sponges, may be laundered, thus eliminating the necessity of individual handling.

It is not generally known that feather pillows may be laundered satisfactorily. Place the pillow in twine or porous bags, wash in the usual way (do not boil), place in dry tumbler to dry and "fluff," and when possible, complete drying in sun and air.

WAYS TO DESTROY AND PREVENT FLIES

Sticky fly paper, which catches but does not poison flies, and fly-traps are both efficacious in destroying those insects. Fly poisons, usually sold in the form of brown paper sheets saturated with sodium arsenite, are very serviceable. Other effective poisons are a one per cent solution in water of either formalin or sodium salicylate (dissolves easily in hot water). One per cent of either of these substances may be obtained by using approximately three teaspoonsful to a pint; either can be purchased in any drug store. The addition of either milk or water does not add to the attractiveness for flies of the poisonous solutions.

The familiar practice of swatting flies is the best way to rid a room of a few of the insects, when the access of more has been provided against, as by effective screens.

Flies should be kept out of hospitals altogether, and particularly should bakeries, dairies, kitchens and dining rooms be free from these dangerous pests at all times. Neither should flies be allowed to crawl over the faces of sleeping persons, particularly babies. Effective screening is absolutely necessary therefore.

It is very necessary that all body discharges, such as sputum, be kept from flies; and that they be kept out of water closets, privies and sick rooms, in order to prevent the spread of germs from these places.

All foodstuffs eaten without further cooking or washing, such as bread, cake, candy, fruit, etc., must be protected from flies.

No decomposing refuse, such as dung, garbage or dead animals, should be permitted to lie around anywhere exposed to flies.

BLEACH JAR MADE FROM DRAIN TILE

In making up bleach for the laundry from liquid chlorine considerable heat is generated, and this high temperature frequently breaks the earthen jars that commonly are used, involving not only much expense in replacing the containers and the lost bleach, but also no little trouble in cleaning up the mess.

To obviate all of this, a laundry manager converted a terra cotta drain pipe, 24 inches in diameter and 30 inches high, into a bleach jar, and there has been no breakage from heat during its several months of continuous use.

As shown in the accompanying illustration, the jar rests on the floor, with the flanged side down. It is imbedded in concrete, with a collar of cement which covers a part of the flange; on the inside is a layer of pure cement, mixed without sand, to prevent seepage.

As may be seen, the container is placed on a small scale

On account of the heat generated, ordinary bleach jars for the laundry are apt to crack when bleach is made from liquid chlorine gas. The jar shown above, which is an earthen drain tile, set in cement, has been in use for several months and there is every indication that it will last for years.

at the side, and a lead pipe runs from the container into the jar. While this particular installation is in one corner of the washroom, it is suggested that where it is possible to do so it is best to place the jar in a separate room, so the workers may not be affected by any gas that might escape. This manager prefers the liquid bleach because it is not as "mussy" as chloride of lime, or bleaching powder, and is less troublesome.

HOME-MADE HOSPITAL DOLL

Small institutions, which find the cost of the commercial hospital demonstration doll prohibitive, will be interested in the instructions for making such a manikin, as they have been carried out by Miss Edna Guillod, R.N., superintendent of the Maple Creek General Hospital in Maple Creek, Sask. The doll, of course, is not as completely satisfactory as the manufactured product, but it is said to be most useful for teaching. Miss Guillod, who is a graduate of the Vancouver General Hospital training school, has described the method she employed in a recent issue of *The Canadian Nurse*.

Head.—Wire mask, lined with Venetian cloth. Form for head made of factory cotton, stuffed with cotton batting and with stiff paper crumpled in the center. Cover head with Venetian cloth, folding it over edges of wire mask. Draw firmly across forehead, then below the chin, leaving gussets at sides. Fasten down with rubber cement.

Ears.—Prominences, filled with cotton. Stitch under chin and pleat at back of neck.

Body.—Cotton combination suit, stitched across at elbows and knees. Two wire frames (heavy clothes line wire can be used), one for chest and one for abdominal region, the latter a little smaller in size. Narrow board for backbone, extending through neck region so that the head turns slightly on it when moved. These frames should be sewed securely to the inside of the combination.

Apparatus for treatment.—Oval metal piece, about 2½"x4", with three orifices, ⅜", ⅞" and ⅝" respectively, with perforations near the edge so that the metal piece may be sewed firmly to cloth beneath. Metal tubing, extending two inches from orifice, to which rubber tubing may be attached. (A diagram was drawn and the work was done in a vulcanizing shop).

Hot water bottle with metal tubing soldered into neck. Rubber cloth vulcanized on sides of bottles to hold it to a wire frame made of one circular piece of heavy wire.

Rubber tubing, ⅝", attached to metal tubing of bottle. Round 8 oz. bottle, with rubber tubing, ⅜", attached; rubber funnel tied securely around neck of bottle with heavy string. Tubing for this attachment about 3" long. To metal tubing, ⅞" in diameter, attach piece of rubber hose with wooden plug driven securely into upper end. Tie a glass bottle to the rubber hose in such a position that it will hold a 4 oz. solution and will siphon back when a bladder irrigation is being given.

Attach the upper end of hot water bottle to interior of the neck and pack paper around the frame for bottle. The frame is held in place by attaching to frame of chest. Use cardboard for wall of chest over hot water bottle. Rubber tubing attachments (⅜" is long enough) to be brought up in front of rubber hose. Reasonable amount of solution is retained in giving treatment if head of doll is not raised on pillows.

Trunk of combination suit stuffed with cotton batting until required shape is made; then one or two layers of cotton batting are rolled over combination to give a fuller contour, and Venetian cloth is sewed on the outside. A neat join may be made by cementing on oval pieces of Venetian cloth (with orifices cut in them) a little longer than the metal piece. All seams have strips of Venetian cloth covering them, the strips fastened with rubber tire cement to make doll water tight.

Lower limbs.—Old stockings stitched and cut out for toes. Stuff with cotton batting. Venetian cloth cut in shape to cover. Stuff toes after putting rubber cement inside. For sole of foot, stiff cardboard covered with cotton batting. Foot stuffed with cotton batting. Straw covers of champagne bottles, stuffed firmly with crumpled paper and wrapped with cotton batting make a foundation for the legs. These may be made a little smaller for the lower leg and a larger size used for the thigh region, with a good deal more wrapping to get the required size. If the straws are long enough a flat surface or bending joint is obtained so that the doll can be placed in any of the gynecological positions necessary in demonstrating. Sew across top of thigh. Sew Venetian cloth on each side of the leg and leave gussets at the sides of knees and heels.

Arms.—Rolls of cotton batting stuffed in sleeves, which are then sewed across shoulders. Rubber gloves stuffed firmly with cotton and cemented at wrists to Venetian cloth covering arms. Sew on in same way as legs.

Hair.—Transformation doubled and sewed down center. Extend from forehead to back of neck; can then be braided on each side of head.

HOLDER FOR RUBBER SHEETING

When the roll of rubber sheeting is kept on a shelf, as it is in ordinary practice, each time a piece of sheeting is wanted, it is necessary to lift the heavy roll, place it on a table and later return it to the shelf. With a full 100 yard roll this is a rather heavy task, and with a 50 yard roll it is not a light one. The young woman who has charge of the supply room in the Jewish Hospital, Cincinnati, has invented a simple and inexpensive holder for the rubber sheeting, and thus has eliminated the necessity of lifting the heavy roll twice each time a piece is wanted.

The roll of sheeting now rests in a holder, and she can unroll the material as it is wanted, just as wrapping paper is drawn from a roll, or reel, in stores, with no lifting. The engineer or "handy man" in almost any hospital can make one of these holders from material which he has at hand. The one in the Jewish Hospital is constructed of pipe and pipe-fittings, but it would be easy to make a substantial reel entirely of wood.

Each of the two uprights is made from a flange plate, a piece of ¾-inch pipe, 10 inches long, and a T-coupling, all threaded to fit. The flange plates are screwed to the table, spaced so that the 36-inch roll will go freely between the T-couplings, after they have been put on the uprights. Screw the uprights into the flange plates, and then screw the T-couplings on to these, with the stem down and with the holes across, so that a rod can pass through them. Cut a piece of ½-inch pipe about 42 inches long, insert it through the hole at one side, pass it through the roll of sheeting, and then through the hole at the other side.

This being done, the roll of sheeting will revolve freely as the material is drawn forward, and when the required amount is on the table the material may be severed. It is well to have a yardstick at hand, to use in measuring lengths and also to use as a straight-edge in marking the material where it is to be cut. Usually the length called for is one yard, but if different lengths are called for it is easy to furnish them.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
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THE TEACHING OF PRACTICAL NURSING*

BY BERTHA HARMER, B.S., R.N., INSTRUCTOR, ST. LUKE'S HOSPITAL, NEW YORK, N. Y.

THE term "practical nursing" calls up varying conceptions in the minds of different people and so perhaps it would be well to consider what we understand by practical nursing before attempting to discuss our methods of teaching it.

In the mind of the public, nursing itself is generally understood to be merely carrying out, with a certain degree of skill, orders prescribed by the doctor. Even very well-informed persons seem to hold this view for, in response to the above remark, an instructor of a group of graduate nurses in a university said, "Well, isn't that all it amounts to?" She and the public in general fail to understand that nursing is a science based on a sound body of knowledge, and that each procedure if given intelligently must be governed by underlying principles. They do not think of the education of the nurse as being similar to that of students preparing for other fields or of the training school for nurses in the light of other schools where a curriculum embracing many subjects must be taught. They do not realize the importance of the nurse, either as a factor in the cure of disease, or as an educator in the great scheme of preventive medicine, nor do they realize that, in order to teach people how to live a healthy, happy, wholesome life, the nurse must have a broad outlook, a wide background of knowledge and experience, and be herself healthy, happy and wholesome.

Public Does Not Discriminate

The public, therefore, does not see the need of supporting schools for nurses as it unquestioningly supports other schools. Neither does it feel the necessity of supporting graduate nurses in their efforts to secure registration, the object of which is to protect the public by requiring all who practice nursing to have a license indicating that they are qualified graduates of a registered training school for nurses. This is because the public does not understand clearly the difference between the "trained" graduate nurse and the "practical" nurse; the chief difference in their minds being merely that the one has received her training in a hospital, while the other has been trained under the supervision of various doctors in the homes of their patients. Perhaps what impresses most persons, often the only point considered, is the fact that the services of the "practical" nurse can usually be secured for less than those of the "trained" nurse. They cannot know that this difference means that not only has the nurse trained in a hospital the advantages of instruction in all the underlying sciences, but that her experience, under expert supervision, in the wards in the daily contact with and care of a great variety of people and diseases gives her knowledge, skill and understanding and develops qualities which could never be gained during many years by the "practical" nurse in the care of individual patients in their homes. They do not see the hospital as a great community health center, whose duty it is not only to cure the patients who come within its doors, but to give them new and better standards of healthful living. They do not see it as a great educational center where workers are being prepared who are to teach these standards in the broader field of national and international public health service.

Now it appears to the writer that this misunderstanding on the part of the public is the natural and inevitable result of the limited conception of practical nursing, typified in the word "trained" nurse, which is held within hospitals, among doctors and within our own ranks. Many nurses far from recognizing or objecting to the limitations expressed in the word "trained," call themselves trained nurses with considerable pride and satisfaction.

The aim of the hospital has been almost wholly confined to the cure of disease as represented in the patients admitted to it, and the education provided for its nurses limited to that knowledge and training absolutely necessary to meet the immediate needs in the daily care of patients within its wards. Emphasis always has been on the training rather than on the education of the nurse, and on the accomplishment of necessary tasks, irrespective of their educational value to the nurse.

Some Doctors Discredit "Trained" Nurse

Doctors too have been primarily concerned with the cure of their patients within the hospital or the home. To accomplish this they realize that there must be someone sufficiently trained to carry out their instructions. Beyond this—who that someone shall be, what her previous education, culture and experience may have been, how thorough her understanding of disease, her patients or the principles underlying the various procedures may be, or what her future needs or the needs of the public may be—doctors, with some notable exceptions, have not felt to be their concern. Indeed, many say that they do not see the need for highly educated nurses and prefer "a good practical nurse," one "who can do as she is told,"

*Part I of Miss Harmer's discussion of practical nursing instruction. The second and last installment will appear in the succeeding issue.

as though these qualities were not compatible with education or knowledge. They frequently even discredit the "trained" nurse by recommending and engaging for their patients a "practical" nurse.

Although nominally a school, the training school for nurses, as a department within the hospital, has been naturally and of necessity primarily devoted to meeting the demands of the hospital and doctors rather than with the education of the nurse. The fact that patients must be cared for, that the tasks are many and varied with few people to do the work, that there are many to be taught and few to teach have all tended to focus and concentrate our attention on the teaching and accomplishment of those things which must be done regardless of their educational value. The teaching of practical nursing has thus been almost wholly limited to the technique or method of carrying out the various procedures in the prescribed way. The theoretical content of lessons has been meager; the underlying principles, the relation between theory and practice have been mostly ignored; emphasis has been placed upon the accomplishment of tasks, on the rigid adherence to prescribed methods and upon acquiring skill rather than knowledge and understanding of the patients.

Our textbooks, our methods of teaching, the method and character of our supervision in the wards have all tended to stress the mechanical, routine aspects of nursing rather than the vital, human and educational side. The student is therefore apt to think not so much of the patient and his needs but of *her* needs, that is of what she has to do, and how she is going to do it and get it done on time. The writer once heard two students on their way to class discussing their morning's work. One said, "I had a perfectly dreadful morning; I had *ten beds to make.*" The other agreed that that was "perfectly dreadful" and wondered how she ever got through with "ten beds to make." I wondered why this nurse should have ten empty beds to make and if so why she considered it so dreadful, so I stopped to inquire if she meant empty beds. She said, "No! Patients in them! I thought I'd never get through."

Students Have Limited Conception

Such is the unconscious attitude and the thought very frequently uppermost in the minds of student nurses. Through them this limited conception of nursing is spread broadcast throughout society. The question for us as instructors of nurses is how can we so teach practical nursing that our students will have a broad, true conception of what nursing really means? How make them appreciate that nursing is a science and that practical nursing is the art of applying, with the highest degree of skill we can attain, all the feeling, knowledge and understanding which this science can teach? It is the altar, so to speak, of service to which we bring all our gifts and graces of body, mind and spirit to be used for the purpose of "creating a better, sounder human being and a more joyful life through such soundness of body and mind." Again, how can we so teach practical nursing that our graduate nurses will be really and unquestionably so much more efficient and desirable than practical nurses, that both public and doctors will recognize the true purpose, value and place for each in the field of nursing? The future of our schools depends upon this proper understanding and recognition.

The following methods offer a few suggestions in answer to these questions.

In preparing to teach any subject it would seem to the writer that two of the most essential requirements are: (1) that we have very clear, concrete aims as to what we are trying to do; (2) that we have a clearly thought-out plan of our course which will accomplish our aims or goal.

Leaders in education tell us that the prime concern of every teacher is to ingrain into her pupils those habits of feeling, thinking and doing which will be most useful and necessary to them in their daily life. For student nurses these will include:

(1) Proper habits of feeling and thinking in relation to their patients and toward nursing as a calling and a profession;

(2) Proper habits of observing and reporting;

(3) Proper habits of learning in the assimilation and application of knowledge;

(4) Habits of doing which will insure skill.

Although a course in practical nursing will differ widely in certain respects from a course in chemistry or anatomy and physiology in a university, yet they are alike in that each consists of lecture or recitation, demonstration and laboratory experience. This similarity suggests that we should plan our course much the same as an instructor in chemistry.

Must Plan Ahead for Full Course

An instructor in chemistry will plan her course for the full period in which the students are to be with her. We should do the same. The full course to be taught should be divided into lessons and these arranged in a logical sequence from the simple to the most advanced nursing measures. The lessons should then be grouped into preliminary, first year and second year nursing. This is necessary in order that the instruction given will be within the range of the student's knowledge, understanding and experience. It is also necessary in order that the lessons in practical nursing may be correlated with the various sciences taught, the lectures given and with the clinical experience in the wards. This correlation will be greatly facilitated if the lessons are also grouped into medical and surgical nursing, etc., as the clinical material is distributed in the wards. It may be said here that of course it will be impossible to correlate the ward experience with the theoretical instruction given in medical and surgical diseases, etc., as long as these lectures are given to large groups of students once or twice a year. This system not only makes adequate correlation impossible but has many disadvantages from a pedagogical standpoint. It makes it very difficult to use clinical material in the form of clinics. It also either depletes the wards to a dangerous degree or necessitates holding the lectures at night, a system which is apt to deplete the health of the students, perhaps to a dangerous degree. Repetition of lectures to small groups means an added expense to the hospital, but better care of the patients and better instruction and health for the students.

Again an instructor in chemistry plans the laboratory work with the same care and detail as the lectures and demonstrations. We should plan it with even greater care and detail for the ward experience is the most vital, most rich in knowledge and opportunities. For it is here that students learn to meet and solve problems and develop not only skill and proper habits of observation, but character, initiative, judgment and all those qualities so necessary and desirable in a nurse.

Our plan then should provide for a definite period to be spent by each student in the various services, the time depending upon the educational value of each. The wealth of clinical material offered in each should be used to the best advantage, and all useless repetition avoided. In addition to the usual services offered, medical, surgical, pediatrics and obstetrics, if possible, experience in the

care of mental diseases, diseases of the eye, ear, nose and throat, and in visiting nursing, social service, or public health nursing should be provided. Every student should have experience in an out-patient department.

Should Check on Laboratory Work

Again, in a university, work in a laboratory is very carefully taught and supervised by the instructor and her assistants. Otherwise, it is recognized that this experience is of very little value. How much more essential is this teaching and supervision in our wards, where not only the education of the nurse but human lives are at stake. In a university detailed reports of the laboratory work are written up by the students and carefully corrected and graded by the instructor. Similar experience records should be provided and written up by our students to be corrected and graded by the instructor. These would not only be of incalculable value to the students but would enable us to regulate their experience and develop a system of credits based on the actual teaching and educational value of this experience.

Our plan should also make proper provision for lectures, demonstrations, practice and drill, study, observation tours, clinics, conferences, demonstrations and final tests. Classrooms, reading room and library should be convenient, bright, attractive, comfortable, and adequately equipped to serve all the above purposes.

It makes for uniformity and avoids confusion to have one person (with assistants) responsible for the teaching of practical nursing. The plan and technique adopted, however, should be the result of the combined efforts of superintendent, instructors, doctors, supervisors and head nurses.

The success of the plan will depend upon the cooperation of head nurses and supervisors. Their suggestions should prove very valuable and they cannot be expected to be greatly interested in carrying out another person's scheme in matters which so vitally concern them if they are not consulted. They should feel that it is *their* plan.

To Insure Proper Habits of Thinking

If the life with the training school for nurses and the profession of nursing is to be an organic life that has within it the elements of growth and progress it must have that unity of spirit and purpose which alone makes organic life and growth possible. Our students enter our schools impelled by various objects and considerations. What they are we need not consider here, but that they are varied, numerous questionnaires have shown. The question is what feeling and spirit are necessary to direct and unite all in one great common purpose?

Looking back over the history of nursing, we must be impressed with the fact that all our pioneers, who did such splendid work and left us such a sound foundation and heritage to build upon, were impelled by high moral and ethical principles and a deep altruistic spirit, a spirit of love and desire to serve mankind. Doubtless it is true of the past, as of the present, that many workers did not have this spirit, but we know nothing about them because they did nothing and left nothing worthy of our remembrance. It is true that whenever this spirit was wanting, the character of the nurses and the quality of the nursing were lowered, sometimes to a very degraded condition indeed. No other ideal could have kept our pioneers steadfast in the face of such hardships, discouragements, loneliness, and all the other trials of pioneer work.

Now *we* are not more capable, intelligent or highly endowed than our predecessors, but have been given greater knowledge, wider opportunities and therefore great responsibilities. We too have problems to meet and must blaze our trails, but we too will fail and be forgotten if not supported and guided by the same spirit of love for and the desire to serve mankind.

This spirit is within the hearts of all of us, but it must have room and opportunity to grow. It is said to be the duty of every school to develop the whole man, not only to impart knowledge, develop intellectual keenness and ambition, but to bring about to the full esthetic sense, the social instincts and a deep appreciation of high moral and ethical principles. We must therefore appeal to and develop this altruistic and spiritual side of our nature. It should be the medium through which we see our patients, through which we see nursing in all its wider aspects, linked to every social agency which strives for the preservation of health, the prevention of disease and the making of sound, happy, sane individuals. It should make us realize that a patient is more than a clever mechanism, more than body, more even than mind, for he has a soul as real as mind and body, and with needs as real. We should develop the spirit of the crusaders going out to rescue victims of suffering and disease. Something of this spirit is felt in those schools where all meet after breakfast for a short stimulating talk, an inspiring quotation, record of achievement, a prayer, a hymn full of hope and courage and where all march on duty together.

Another thing closely akin to this spirit is the love of an artist for his work. We should cultivate this feeling and encourage an enjoyment of good drama, music, pictures, etc., for the emotional life is very necessary where feelings form such a guiding and compelling influence in one's work. We may appeal, too, to the dramatic instinct, for we are all actors in a wonderful drama having elements both of tragedy and comedy. Actors work to please others and for the love of their art. They must always be at their best even when tired, nervous, discouraged and unrecognized. Why should not nurses cultivate this feeling? We need to stimulate and cultivate the imagination. Without it, a nurse cannot place herself in the position of the patient, his relatives, or friends and therefore cannot feel for them as she should. Without it we cannot have a sympathetic understanding and appreciation of the significance of past or present events in nursing history or a vision of future possibilities. Imagination lends color and vitalizes all that we do. It keeps us from being chained to the routine cares of the day. It is the light inherent in inspiration which glows along the path which leads to progress.

This proper feeling and attitude toward our patients and our work are largely dependent upon good health and adequate attention to our general appearance. Consciousness of ill health, fatigue or of rundown heels or a soiled limp collar, all tend to focus attention on one's self and set up inhibitions to the proper discharge of our duties.

Again this proper feeling and attitude cannot be developed by preaching nor by a course in ethics. It must come from some inner ideal. The students must feel it present in the thoughts, the actions, the personality of those about them to whom they look for example, and in the whole tone and atmosphere of the place in which they live and work.

Selection of Instructor

The instructor of practical nursing is perhaps closer to the students than anyone else can ever be, so she has great opportunities and greater responsibilities. From her they get their first and most lasting impressions of what nursing really is and to them she is naturally an example of what a nurse really ought to be.

Because of this early and far-reaching influence and because the subject itself is the most important in our curriculum, the pinnacle to which all the rest is but a foundation, the selection of an instructor of practical nursing must be made with great care. Her personality, qualities of leadership, knowledge, experience and abilities as a teacher must all be considered. Those who teach practical nursing with an appreciation of the importance and possibilities of the subject are always conscious of need for greater knowledge, a wider, richer experience, and understanding of the principles and methods of teaching.

MENUS IN SCHOOLS OF NURSING

By Mabel F. Huntley, R.N., Director, School for the Teaching of Preliminary Courses, Philadelphia, Pa.

What has become of the criticism, so often heard, that student nurses are not given wholesome, appetizing food in sufficient amount and variety? Recently, quite incidental to a piece of classwork which was of a general character, there occurred an opportunity to study the diet for one day of fifty student nurses representing seven hospitals of Philadelphia. The result was so gratifying and offers so good an illustration of the fact that this detail of hospital administration has undergone considerable improvement, it was thought that perhaps others might be interested in a report of the study.

The class assignment was made at the first period of the course in personal hygiene. In order to catch the students unprepared, and to have a basis for later comparison, they were asked to write a summary of their "health habits" of the twenty-four hours beginning with 7 p. m. of the evening before; it was 3 p. m. when the assignment was made. A short explanation of what is meant by "health habits" was given by the instructor, and the students were told to include the menus of the three meals served on the day of the class and to state whether they ate the food, and if not, why not. The hours of sleep, recreation, bathing, etc., were also to be covered by the summary.

When the reports were examined by the instructor, she was impressed by the attractive menus reported, and found herself comparing them with her own student days of twenty years ago. It is true that there are other factors than those represented by a study of one day's menus to be considered, before a general conclusion could be drawn. Does the lamb stew always constitute the Monday luncheon in the one hospital, and does cold roast beef on the menu of another imply that roast beef is always the Sunday dinner?

The report is offered only for what it is worth, as it came honestly from the fifty surprised students. It does not pretend to be an academic study of diets and perhaps will not prove as interesting to readers as it did to the instructor who merely wished to help the student to see that she had an obligation to the hospital in cooperating with its administration to make the food served of greatest value to herself.

Very few of the students reported no appetite; none gave as a reason that the food was unpalatable. One only said she never ate breakfast and the cup of cocoa served as a mid-morning lunch satisfied her until dinner time. Two reported candy eating after 7 p. m. and one confessed to ice cream before going to bed. Not a large amount of "paper bag" lunching during evening hours, it would seem. Three students confessed themselves too excited by the preparation for the first day at the "Central School" to do justice to the food provided.

The menus are set down just as they were taken from the students' papers, and it will be noted that sometimes the kind of fruit or cereal is not specified, and the kinds of beverages served do not always appear.

Hospital	Breakfast	Dinner	Supper
No. 1	Grapefruit Cream of wheat Creamed beef Coffee, milk	Roast pork Sauer kraut Boiled potatoes Bread and butter Syrup	Liver Baked potatoes Bread and butter Bananas
No. 2	Cereal Bacon and eggs Toast Coffee	Lamb stew Peas Bread and butter Peaches	Potato salad Bread and butter Coffee Dessert
No. 3	Prunes Cereal Creamed beef Toast Coffee, milk cocoa	Celery soup Meat croquette Baked potato Bread and butter Maple pudding	Roast beef Mashed potatoes Peas, celery Bread and butter Ice cream
No. 4	Prunes Oatmeal Mackerel Bread & butter Milk	Cold meat Creamed potatoes Bread and butter Pineapple	Corned beef Potatoes Cauliflower Bread and butter Rice pudding
No. 5	Prunes Cereal Poached egg—toast Cocoa	Cold roast beef Waldorf salad Pickles Graham and white bread Fruit jello	Chicken soup Meat Potatoes Spinach Bread Milk Ice cream and lady fingers
No. 6	Fruit Corn flakes German toast Coffee, milk	Roast beef Boiled potatoes Peas Bread and butter Grapefruit	Bologna sausage Fried potatoes Graham crackers Milk Fruit jello
No. 7	Orange Cereal Chicken livers Toast Coffee, milk.	Noodle soup Beef with gravy Mashed potatoes Bread and butter Dessert Coffee	Chicken croquette Mashed potatoes Creamed peas Bread and butter Cocoanut pie Milk

MISSOURI NURSING LAW REPEALED

By a Missouri Nurse

Those in all parts of the country interested in nursing laws have been watching the fate of the Missouri law in the recent session of the state legislature, and are chagrined to learn that the law passed in 1921 has been repealed, and another, the chief purpose of which is to lower standards, has been put in its place. The 1921 law making registration of nurses obligatory, providing for the licensing of attendants, gradually raising the educational requirements of accredited training schools and securing the appointment of an educational director to supervise and advise the nursing schools is now an historical landmark, and no longer stands on the statute books of Missouri.

Hardly was that law passed, and long before it was in full operation, there was evidence of opposition rolling up against it. The opposition came from a small group of so-called "practical nurses" who objected to being classed as attendants; it came from the country districts which feared that obligatory license laws would prevent them from securing nurses; and it came in greater force from the smaller hospitals, especially in St. Louis, which feared that raising educational standards would cut off their supply of student nurses "to do the work of the hospitals." Undoubtedly some of these fears were justified.

When representatives of some of these hospitals went on record in a hearing before the house committee on public health, as believing that the grammar school girl makes a better nurse than the girl with the high school education, it was a frank admission of the fact that the girl

who is educated and can think for herself does not choose the training school that will not promise her an education as well as the much desired experience in the care of the sick.

"Education puts notions in girls' heads," remarked a member of the medical profession at that hearing, "and we cannot make nurses out of such girls."

"The sick room is no place for education and refinement," was another contribution to the discussion.

Thus was the legislature bombarded, and gradually general sentiment was swung in the direction of lower standards with the result that after considering various bills offering a substitute for the existing law, in the last week of the session the House and Senate came to an agreement and passed a bill which was soon signed by the governor, striking from the statute books a piece of conspicuous nursing legislation of which the whole country has been proud and which has served as an example for similar legislation in other states. For a while it seemed as if the legislature would abolish the nurse practice act altogether (such a bill was actually passed by the House, but not accepted by the Senate), but the final enactment does provide for a new nursing law which will go into effect June 26.

According to the new law—not remarkable as to structure, and very difficult of interpretation on several points—the minimum requirement for accredited schools will be grammar school only, until July, 1925, and after that date one year of high school; there is to be no educational director, although the board of nurse examiners shall appoint a secretary; no provision is made for the licensing of attendants or the accrediting of schools for attendants, but "any persons known as practical nurses who have submitted to the board satisfactory written evidence of their qualifications to practice as practical nurses, who have paid the required fee, shall be permitted to use the abbreviation 'P.N.' in designation thereof;" a new board of nurse examiners is to be appointed, the majority of which shall be nurses. Whether this law makes registration obligatory for nurses in order to practice is rather difficult to determine, although probably such was the plan of its authors.

Careful study of the law would seem to indicate that much depends upon the board which the governor shall appoint, for much of the effect on nursing standards in Missouri will rest on the interpretation and the administration of this new legislation. This is interesting, and even amusing, if we recall how much of the criticism of previous conditions was directed against the board of examiners and what was considered "the unreasonable amount of power granted them by the act of 1921."

Such is the result of a successful political game and persistent lobbying on a legislature which is conspicuous for a lack of constructive legislation and for an inclination to break down educational standards in more than one field. Does it represent the sentiment of the commonwealth? It is easy to believe that it does not; for the interest displayed by both organizations and individuals in holding to high standards, although that interest was awakened too late to be organized effectually, indicates a very great step in advance: the realization by the public that nursing affairs, and especially nursing legislation, are not matters that affect nurses alone, but to an even greater extent affect the public. And it is the public which must be concerned with anything that so vitally concerns the health of the people.

"Happiness is the only good. The time to be happy is now. The way to be happy is to help make others so."

CELEBRATES FIFTIETH ANNIVERSARY OF TRAINING SCHOOL

To celebrate the fiftieth anniversary of the founding of nursing schools in the United States, and of public health and social work developed through the graduate nurse, the nurses' training schools of greater New York held a celebration on May 8. It was held in Carnegie Hall under the auspices of the board of managers and the alumnae association of the Bellevue training school for nurses of the Bellevue Hospital. Miss Lucy Minnegerode, head of the Nursing Bureau of the United States Public Health Service and Major General M. W. Ireland, surgeon general of the Army, were among the speakers.

Enormous strides have been made in the profession of nursing since its inception fifty years ago. The training school for nurses of Bellevue Hospital, founded in 1873, was the first training school in America along the lines laid down by Florence Nightingale, and has served as the model for other institutions of a similar character, both here and abroad. In America alone 1,577 registered schools of nursing have been established, and 163,868 trained nurses graduated from them. There are now, in round numbers, 150,000 trained nurses in the United States; 15,000 graduates in hospitals conducting schools, and 55,000 students in training. Nursing is the second largest profession for American women.

A committee of New York society women were requested by the health commissioner of New York to visit Bellevue Hospital in 1872. They found patients suffering from frightful sanitary conditions and neglect. The only nurses available were women of little intelligence who had no interest in nursing as a profession; and at night the patients were under the casual surveillance of the watchman. It was not uncommon, when the doctors visited the wards in the morning, to find patients who had died unnoticed during the night. These conditions, to a greater or less degree, were common in all hospitals, not only here but abroad.

This committee of women decided that the trained woman nurse was the only solution of what they saw, and accordingly, in the following year, the first training school for nurses was started with six students. From that small beginning the profession has grown to its present proportions, and as a result of their work, hospital administration has been almost completely revolutionized, and hundreds of thousands of lives saved that would have been lost under the old conditions.

CAPTAIN IN U. S. ARMY

Miss Cora Thompson, upon whom the rank of captain in the U. S. Army has been conferred, is head of the nursing staff of the Letterman General Hospital at the Presidio, San Francisco. Capt. Thompson was formerly chief nurse at the government hospital in the Philippines.

(Keystone View Co.)

"The great thing in all education is to make our nervous system our ally instead of our enemy."—William James.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

DIETETICS IN VANCOUVER GENERAL HOSPITAL

BY MAUD MARION TROOD, DIRECTOR OF DIETETICS, VANCOUVER GENERAL HOSPITAL, VANCOUVER, B. C.

THE dietetic department plays an important part in the properly conducted modern hospital of the present day. The supplying of materials in the form of food to build up and repair tissues, to supply heat, energy and the body regulators necessary to retain or regain that harmonious interaction and balance known as health, is no longer a matter of guess work but a matter of science and the practice thereof a recognized profession, with hospital dietetics as a specialty. The dietitian therefore requires a knowledge of nutrition, of physiology, food chemistry, and the effect of the various kinds of foods on the system in health and in disease. She requires knowledge of the changes that take place in the process of cooking, of the art of serving, of the economical use of foods and of supervision.

The development, or shall one say evolution, of the dietetic department in a rapidly growing hospital is interesting. This has been particularly true in the hospital with which the writer is connected, an institution growing from forty-five to 1200 beds in a few years. Not only the dietetic, but other departments, found it necessary to make rapid adjustments in order to keep pace with increasing bed capacity. Tracing the history of development in the institution referred to, we find five distinct periods of interest:

Five Periods in Development

First: A period when the superintendent of the hospital was charged with the direct supervision and more or less of the detail of all services in the institution. A good cook or cooks and kitchen staff were employed under the supervision of the superintendent. This arrangement gradually grew more and more onerous as well as complicated, when the hospital passed its 100 or 150 bed capacity, and soon additional staff and increased organization were necessary.

Second: The appointment of a competent housekeeper marked the beginning of the second period and brought with it an adjustment of duties which resulted in all detail and supervision of the dietary being transferred to the new department; the housekeeper, however, being responsible to the superintendent for this. Lucky indeed for the hospital, when the incumbent of such a position is a woman with good knowledge of housekeeping details and of dietetics. In the case being described a graduate nurse with such knowledge and experience was obtained.

The continued rapid growth of the hospital and the establishment of definite standards for teaching and training nurses in this branch of work, made it imperative that there should be a division of duties—the purely housekeeping on the one hand and all that involved the food or dietary on the other. Thus there came a cleavage of duties with the hospital between 300 and 400 beds in capacity, and another stage in development was reached.

Third: The appointment of a full-time dietitian, establishing a separate department, having to do entirely with all matters pertaining to the food or dietary so far as quality, cooking, distribution and service was concerned, marked the third stage. As her work grew assistants with well-defined duties were added. Interest developed rapidly and in recent years this has become more scientific in nature. The medical profession in the past few years have been much impressed with scientific feeding or dieting. Its members fully realize the value of carefully prescribed diet and its relation to nutrition, to health and disease. Some diseases today are treated almost wholly by dieting. This scientific interest brought about further development or organization worthy of note.

Fourth: Through the more intensive study of metabolic disease in blood chemistry and physiological laboratories a closer relationship of the dietitian and her department to the latter was recognized, and today real team work exists between them. All feeding cases now receive more scientific thought. There is less routine, more measured, weighed and special dieting done, following out the prescribed order of the physician after studying the individual cases, rather than applying a group standard. A metabolism clinic has rapidly grown, adding a greater load to the department but affording more interest and teaching opportunity. The rapidly growing demand for scientific dieting necessitated the increasing of the dietetic staff with the same rapidity to four full-time dietitians. It is the object of the dietetic department not only to see that the patients have correct diet while in the hospital, but to so educate them along dietetic lines that they have some knowledge of dieting their own specific cases when discharged. But the story does not end here for another interesting phase or development follows.

Fifth: It is recognized that most hospital work nowadays requires proper follow-up in order to make the results of scientific care more permanent. This was found to be quite true in scientific dieting, especially in such cases as diabetes discharged from the hospital. In our case a number of the patients returned for advice regarding their special diets, and then the dietitian who developed this department took on the follow-up work on her

own private enterprise and so far has made a splendid success of it. She visits their homes and there instructs and supervises in the preparation of the prescribed diets, and checks patients' condition generally as indicated by weights, symptoms, etc., as well. This she carries on in entire cooperation with the attending doctor.

Close Relationship with Other Services

All dietetic departments in hospitals do not grow or develop in such a manner. The evolution of the department in this particular hospital may have passed along lines different to what would have occurred in the present day, for there is now a more serious realization that all hospitals from their inception should have a dietitian and a dietetic department whereby, the patients not only can be better cared for by proper and scientific dieting, but nurses can be instructed and trained in this important branch. It is only in recent years that the hospital profession generally has begun to realize the important scientific bearing that food has on health or disease. On this account hospitals are recognizing the need of such a department as one of the fundamental units when building or organizing an institution.

The dietetic department is closely related to the many other departments of the hospital, as well as to the staff and patients. It is very closely connected with the medical department as dieting has a distinct influence on the course of disease in many instances, and special diets are often prescribed as part of the treatment. It is closely related to the nursing department from the standpoint of the education of pupil nurses who receive lectures and training in practical dietetics, as well as training in the service of the food to the patient. There must be close communication and working with the chemical and bacteriological laboratories in the scientific portion of its work at least. Finally, and indeed not of little importance either, is the relation of this department to the business division of the institution. There must be the utmost cooperation to insure the economical expenditure of money in the purchasing and handling of food. Too much emphasis cannot be laid on these relations and responsibilities outlined.

Dietetians Have Three Functions

The functions of the dietitian are three-fold: supervisory, scientific and educational. Her units of responsibility as head of the department should embrace every phase that pertains to the food, especially as to quality, cooking, distribution and serving. In many cases there also may be the added responsibility of purchasing and handling.

As head of the department and in complete charge of the food, the incumbent thereof is sometimes designated as the dietitian, the chief dietitian or the director of dietetics. The writer prefers the latter designation as it carries with it more dignity as well as implying initiative and responsibility.

The underlying principles in a dietetic department in a hospital should be science, efficiency, cooperation, economy and service.

As stated before, science in dieting is much regarded today. Well balanced dieting must not be lost sight of for a minute in any institution. Routine standards of a universal nature must be replaced or characterized by scientific methods or considerations. A study of each case on its individual merits is the surest means of success in disease.

Efficiency is a quality universally necessary in anything that succeeds, and it must prevail in the dietary department, in the kitchens and throughout the institutions. Time is always an important element in the preparation and serving of food, and a well trained, experienced, efficient staff in the kitchen is indispensable. We must be sure that this quality is found in every person from the dietitian to the dish-washer or scullery man.

The day of cooperation as a feature of our institutions is keenly recognized. The staff of the dietary department consisting of nurses, men, women, cooks of various kinds, maids, helpers, food carriers and others must all work together, each having his or her own particular part to perform but the component units of the entire organization fitting into each other so as to make a harmonious working whole. The work of one must be timed and executed in the necessary relations to that of the other, and the taking up of one process by the other without delay or disorganization; the helping of one by the other and all together. Dissensions, jealousies or bad feeling in the kitchen embarrass service, and react all through the hospital, eventually sending home dissatisfied patients, which is the worst publicity a hospital can receive.

Means of Preventing Waste

Everywhere we are emphasizing economy in hospitals in all things. No other departments can be responsible for more waste than that of the kitchen, unless due control is exercised. What are the underlying principles, therefore, to prevent waste? To enumerate them serially there are:

1. The purchasing of good quality of food at the best price. This may be done by tender, by large amounts or by buying at a particular time when prices are good or on the open market.

2. Proper, adequate storage and refrigeration to prevent waste and to permit of buying in large amounts.

3. Competent and efficient kitchen arrangements with good equipment placed so as to minimize effort and energy, and a well trained and experienced personnel which can turn out work of good amount and quality.

4. Making the service of food pleasing to the taste and attractive to the sight of the patient. In this respect the meals must be hot and daintily served. It is indeed advisable to have a more or less selective service if possible in the hospital. To this end the daily menu is our best solution. One article of undesirable food served to a patient may arouse disgust for all the other food served. Small helpings repeated are better than giving too much at one time and will have a great effect in reducing the volume in the garbage can.

5. Daily supervision of garbage cans in wards and before dispensing of same by a responsible officer of the hospital is exceedingly important. A check-up here must be carried out consistently.

6. The reclamation of all uncontaminated waste or remnants is essential; for instance, the rendering of fat from meats, the final content being used for cooking or for sale, and that which cannot be so reformed for making laundry soap. The keeping of the outer vegetable leaves, bones, etc., makes a substantial basis for the stock soup kettle. The using of all toast and bread crusts not contaminated for crumbling, dressing or puddings is an economy worth recognizing, while that which is contaminated can be sold for chicken feed. The making of jelly out of apple peelings and candied orange peel out of orange rinds not contaminated, are processes which are being carried on in diet kitchens today, adding a very splendid objective lesson to those in training for conservation and reclamation.

7. The last, but not least, principle laid down is service, the fundamental requirement for the success of anything

today. The public today demands service and the diet kitchen must always keep this in mind, for it has a large clientele to serve and satisfy, including the entire staff and roll of patients. Poor food dissatisfies worker and patient and reacts in many ways, resulting eventually in loss of interest in work by the employe, a grouching habit, and puts the hospital in disfavor with the patient who disseminates bad publicity when discharged from the institution. Every detail of the entire system or organization in the dietary department must of necessity be characterized by the highest degree of service.

NEWS ITEMS

The sixth annual meeting of the American Dietetic Association will be held at Hotel Claypool, Indianapolis, Ind., Oct. 15-17.

Mrs. Octavia Hall Smillie, president of the American Dietetic Association, is now living in Andalusia, Ala., where her husband, Dr. Wilson Smillie, is establishing a modern health unit for the Rockefeller Foundation. Mrs. Smillie is conducting a dietary survey of the people in South Alabama.

The Massachusetts Dietetic Association, formed last winter, with a membership of between forty and fifty, has held two very interesting meetings. In March, Mr. Herbert Lythgoe spoke on "Pure Food Laws," and at the April meeting Mr. Rossiter, display manager of Filene's and Sons, Boston, gave an illustrated lecture on "Methods and Results of Advertising." Miss Ruth Wallace, chief dietitian of the Phillips House, Massachusetts General Hospital, Boston, is the president.

Miss Lulu F. Sidwell, former dietitian at the Maternity & Children's Hospital, Toledo, was married March 28 to Mr. Homer Wiliam Hawkins. She left Toledo, May 1, to live in Washington, D. C.

Miss Jessie King has resigned her position at Grant Hospital, Columbus, and will be with her parents until autumn.

Miss Mary Sedgewick has given up her position at Washington Boulevard Hospital, Chicago, and is temporarily at her home in Waterloo, Iowa.

Miss Katherine Hagerty has accepted a position as assistant dietitian at Mount Sinai Hospital, New York.

EXERCISES MARK OPENING OF NEW CLEVELAND CITY HOSPITAL

Special exercises were held in connection with the opening of the general ward building of the new Cleveland City Hospital on April 8. This building is the last of five to be constructed in a building program inaugurated in 1921. The nurses' home was opened in August, 1922, the contagious disease building in September, the service building in October, and the psychopathic building in November. The April exercises covered the opening of all buildings. The general public was invited and the entire hospital grounds with the exception of the psychopathic and contagious wards were thrown open to inspection. All employes acted as guides.

It had been planned to hold the ceremonies outdoors using the balcony of the second floor for the speakers, but the weather made this impossible. About 550 of the 10,000 who visited the hospital during the day were able to crowd into one of the sixteen-bed wards on the second floor where the exercises were held.

Dr. George N. Stewart, professor of experimental medicine of Western Reserve University, was the principal speaker and took as his subject "The Relation of the City Hospital to the Community." Dr. Stewart received his early training in the Edinburgh Hospital, and he gave an interesting talk on the progress made in hospital construction. He also emphasized the mutual benefits derived from having a large medical school affiliated with a modern and well equipped hospital. Dr. Carl A. Hamann, chief of the department of surgery, talked on the history of the City Hospital. Dr. Hamann has been connected with City Hospital for over twenty years and has been professor of applied anatomy and clinical surgery of the Western Reserve University since 1893. Mayor Fred Kohler gave a short talk on what he planned and hoped for the future of City Hospital. The director, Mr. Ralph Perkins, presided, and told the public of the maximum service which the hospital would give to the community.

CALLS BOOKS ONE GOOD REMEDY FOR MENTAL PATIENTS

There is no sharp line of demarcation between the book service in a neuro-psychiatric hospital, and the branch public libraries of any of our large cities; the difference in rather one of degree than kind. The same is true of psychopathic patients and those not patients but healthy members of the community, said Mrs. M. P. D. Miller, librarian at the U. S. Veterans' Bureau Hospital No. 78, North Little Rock, Ark., at the recent annual meeting of the American Library Association at Hot Springs, Ark., in an address on "The Therapeutic Value of Books in a Neuro-psychiatric Hospital."

The every day vernacular "on edge," "irritable," "flying to pieces," "depressed," "keyed up," "grouchy," interprets to the layman the familiar side of a wonderful scientific study, one, however, that has a distinctly therapeutic application.

Individualization being the keynote of treatment, librarians hold that no dispensary has a larger variety of remedies for every ill that the mind of man is heir to, than does a library. The reference assistant knows that one must be able to project ones self in imagination into the mind of the inquirer and discover what is really wanted, which is often quite different from what is asked for.

"This is exactly our methods at the Veterans' Hospital," said Mrs. Miller; "knowing our tools, getting the patient's need, we try out for therapeutic worth. Just the same old effort in the same old way, only more so; humanizing that elusive myth, 'the library spirit.'"

"Here as elsewhere we find the potent influence of the book can stimulate the apathetic to activity, give wholesome thoughts to the day dreamer, sidetract a morbid impulse or soothe the anxiously apprehensive by a soul-stirring narrative or absorbing story, virile biography, inspirational book, or poetry; by creating an environment of normalcy."

Our chief want in life is somebody who shall make us do what we can. This is the service of a friend. With him we are easily great. There is a sublime attraction in him to whatever virtue is in us. How he flings wide the doors of existence! What questions we ask of him! What an understanding we have! How few words are needed! It is the only real society.—Emerson.

Now is hightide of the year
And whatever hath ebbed away,
Comes flooding back with a ripply cheer
Into every bare inlet and creek and bay.
—James Russell Lowell.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

FOOD SERVICE OF CHRIST HOSPITAL, CINCINNATI

By WALTER T. WILLIAMS, Cincinnati, Ohio.

WHAT is known as the "annex" to Christ Hospital, Cincinnati, is the result of an earnest effort to put into effect the most modern ideas of hospital construction, furnishings, equipment and administration. The superintendent of the hospital is Miss Alice Thatcher, and before the construction of the addition she, with others, visited many hospitals and made a broad study of conditions, with a result that many mistakes and defects noted in other institutions were avoided.

Recognizing the great importance of having a suitably located and well-equipped culinary department, careful consideration was given to this section of the institution. The hospital contains 175 beds, of which 92 are private, 42 are semi-private and 41 are in wards. The personnel consists of five interns, fifteen graduate nurses and ninety student nurses, with the usual complement of administrative officers and general employes.

This will give the reader a general idea of the quantity of food that is to be prepared; but before going into the details of this it may be well to make a few brief statements about the institution, in order to make the matter clear.

The hospital is located on Mt. Auburn, which towers several hundred feet above the business district of the city. The annex is composed of two wings, one extending in a southeasterly and the other in a southwesterly direction from a rotunda which forms its entrance. It is a fireproof structure, but nevertheless it is furnished with appliances for fire prevention. South of the annex is the old building, and each floor of the two buildings is connected by a covered passageway with the one opposite.

A beautiful, commodious and well-arranged nurses' home is located at the west. The power building, with its large electric plant and ice plant, is located on the north of the hospital, and next to it are the laundry and the garage.

The interior of the hospital is artistic and attractive. Its walls, finished in soft tones of gray, are most pleasing and restful. The entrance rotunda, instead of being cold and forbidding, creates an atmosphere of cheerfulness and welcome. Opening from this lobby are the staff room, the general office, and the waiting room for visitors to the patients. The southwesterly corridor leads to the administration rooms and the committee room, and also to the apartment of the superintendent. The southeasterly corridor leads to the laboratory, the pharmacy, the record room and the quarters of the house staff.

The Kitchens

The main kitchen is located on the fifth floor of the annex. The room is a large and attractive one, about forty feet square, with all of the lastest equipment. The cooking unit is composed of six gas ranges, arranged to form a square. This compact unit is placed in the middle of the room and can be used from every side.

Two of the accompanying illustrations give a good gen-

Two sections of main kitchen of Christ Hospital, Cincinnati.

View in liquid nourishment kitchen of Christ Hospital.

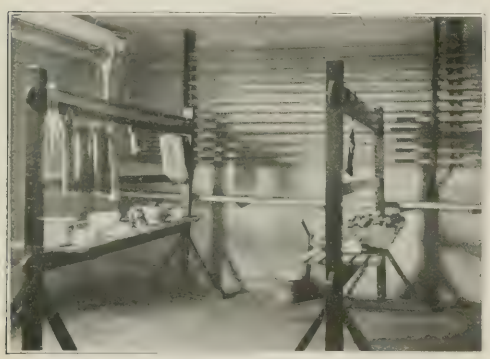
eral idea of the arrangement and equipment of the main kitchen. A blackboard which may be seen in one picture tells the number of persons to be fed on each floor and the kind of a meal they are to receive, these being classified as "general," "light" and "soft and restricted."

Adjoining the main kitchen are what may be called two smaller kitchens. One of these is devoted to the preparation of desserts and salads, and in the other are prepared all of the liquid nourishments, such as lemonade, fruit juices and milk and egg drinks. Two of the accompanying views give a good idea of this latter room and its equipment, which is very complete.

The large cold storage rooms are conveniently located, these being at the north side of the kitchen and adjoining it. The interior of one of these, the meat room, is shown by an accompanying view. Besides this there is a cold storage room for milk, butter and eggs, one for vegetables and fruits, and one for beverages.

At the extreme end of the east wing is a large storeroom for canned goods and general supplies. This is fitted out with shelves that are built on pedestals, and thus aisles are left which make every part accessible both for use and for cleaning. On the south side of the corridor in the east wing is located a dining room that will accommodate about thirty persons. In the day it is used for those who are employed in the main diet kitchen, and in it at night are served the midnight lunches of the nurses.

A small storeroom opens from the west side of the main kitchen, and in it are kept sugar, flour, vinegar, cereals and dry vegetables. Just back of this room and on the north side of the west corridor is a fully equipped and thoroughly up-to-date domestic science room. At the extreme end of the west wing has been fitted up a beautiful and well-ventilated dining room, in which meals are served on special occasions.



View in meat refrigerating room of Christ Hospital.

All food for the patients is prepared and cooked in the diet kitchens, which are located on the fifth floor of the annex. On each of the other floors of the hospital is located a small diet kitchen, all of these being centrally located. Each floor diet kitchen is equipped with a steam table, a gas stove, shelves for setting up and unsetting the trays of the patients, and built-in refrigerators—chilled with brine from the refrigerating plant. Glass panels permit the inspection of the contents of the refrigerators without loss of refrigeration.

View in liquid nourishment kitchen of Christ Hospital.

The most modern dietary practices and arrangements are used. The food is transferred from the kitchens on the fifth floor to the diet kitchens below by means of food-carts, and the maids in these diet kitchens always have everything in readiness to serve patients promptly. The system is worked out so that hot foods will always be served hot and cold foods always will be served cold, and with drinks it is the same.

APPEALS FOR NEAR EAST ORPHANS

Dr. Esther Lovejoy, chairman of the American Women's Hospitals, and president of the Medical Women's International Association, has joined a committee of fifty leading American women, organized to help the destitute orphans of the Near East. The members of the committee are appealing to every woman in this country for a special gift to save the new orphans of the Asia Minor tragedy, and to re-establish in permanent quarters some 20,000 children recently removed from American orphanages in Turkey because of the military situation, who are now located in overcrowded temporary refuges in Syria and Greece. Although these children are part of the 115,000 orphans regularly cared for by the Near East Relief, additional funds are needed to settle them in permanent quarters in the new territory and to cover the cost of their transportation out of Asia Minor.

Dr. Lovejoy knows at first hand the pitiful conditions in the war-wrecked countries of the Near East. She was in Smyrna at the time of the fire and assisted in the difficult work of relief in that city of terror. In December she returned to the United States to raise money for the American Women's Hospitals, and has but recently sailed for Greece, where she is now engaged in medical work among the child refugees.

She describes the condition of the children in the Near East as pitiable in the extreme.

"I have heard American women say that we have plenty of suffering in our own country," she says, "and so we have. But I assure the women of America that nowhere have we the destitution and misery that exist in the Near East. There I have seen little children lying dead from hunger in the streets, and no woman has seen that in America."

BREAKAGE AND LOSS

By HAZEL A. GOFF, R.N., Principal, School of Nursing, Blodgett Memorial Hospital, Grand Rapids, Mich.

UPON the subject of breakage and loss there probably is more talking done and less real good accomplished than upon any other problem in connection with hospital life. It is such an immense topic with so many divisions and subdivisions that this discussion of it will be confined to the articles which are more closely related to the nursing department.

In a general way, real economy depends upon the following things:

1. Budget system.
2. Inventory with an established standard.
3. Graded inspection to create competition.
4. Repairs kept up to date.
5. Supply requisitions made at a definite time for a definite quantity.

You may say, what has this to do with the subject? Everything. In the first place, if you do not know how much you can spend in a department, you do not know how much new equipment you can afford, how much old equipment you can afford to lose or replace, or how many supplies you can use. If a definite allowance is set for each department then you can estimate how much you can expect for essentials or luxuries, if any will be forthcoming, and set your economy regulator accordingly.

An inventory, if a budget system is followed, is maintained for the whole institution but does not apply to its various small units. For instance, a definite standard and stock of movable equipment should be kept on each ward and checked weekly by the head nurse. This standard should be sufficient to meet all ordinary needs. There should be an available stock for emergencies which can be borrowed and returned after the emergency ceases. The equipment should be of the same type and quantity and kept in relatively the same place throughout the hospital. This saves much time and confusion when nurses change from one department to another.

Should Make Bi-monthly Inspections

To keep the standard up, to insure a thorough weekly cleaning of all departments, to teach students order and cleanliness, to improve their powers of observation and to create a healthy competition between departments, the superintendent of the hospital should make bi-monthly inspections. Each department should be inspected in detail and graded accordingly. This will do more to maintain a good standard and a keen interest than any other one thing.

Small repairs are most likely to be neglected and so need constant attention. Unless the stock is kept up to standard, a department suddenly seems very shabby and run down at the heel.

A definite day, a definite form and order for requisitioning supplies should be maintained, for most humans have the hoarding tendency, and it does not make for efficiency in care and cleaning.

This scheme as outlined, combined, not so much with that poor overworked term cooperation, but with the genuine interest of every individual in his work, will make for the strictest economy without danger of excessive frugality.

It has been said that saving is a state of mind and a person to save must have some reason which will give him the impulse to save. Individual saving in an institution means group saving. Saving or conservation means less loss and more advantages to be gained for all. The amount saved by the most efficient purchasing system as compared with the average purchasing system will not exceed 5 or 10 per cent, while the proper regulation of supplies may easily bring a saving of from 15 to 30 per cent.

The principle to be considered is not so much how we will take care of breakage and account for lost articles as how we can prevent these accidents from occurring. Possibly the best way to discuss the breakage and loss question is to outline the methods used at Blodgett Memorial Hospital in handling supplies.

The standing order book in each nursing department contains an alphabetical list of the general and medical supplies. From this list, following that order, a requisition is made out for the necessary weekly supplies by the head nurse. The requisition is checked over by the supervisor and sent to the training school office where the principal looks it over, questions or cuts down, if necessary, and signs it before it goes to the superintendent. This order then goes to the supply department the day before it is to be filled.

The Fracture Basket

Each nursing unit has a fracture basket which is kept in the service room, and every article that is broken or needs repairing is put in it to go to the supply room on requisition day. Duplicates of broken articles are ordered on that week's requisition to keep up the standard of the ward. The empty fracture baskets are used to return the new supplies to the ward.

The advantages of the fracture baskets are that broken articles are kept in one place where they can be easily looked over and so do not get mixed in with paper, flowers, etc. in the waste cans and thence reach the incinerator.

In our institution the only broken articles for which the nurses have to pay are thermometers, syringes and glass dresser tops. We maintain an exchange for the small articles in the training school office. It is essential to have complete equipment on the wards at all times and if a nurse breaks a thermometer and cannot pay for it at that time, the ward runs short and others suffer. To overcome this, the article is immediately replaced and the nurse is charged with it and is checked off as she can pay. Every few months bills are sent as reminders to nurses who have forgotten their obligations.

In some schools a deposit for breakage is required when a nurse enters training. This saves considerable time on the part of the training school staff in constantly checking these details.

Should Nurse Pay for Breakage?

At a recent section meeting of the American Hospital Association the matter of breakage was discussed, and it was the consensus of opinion that a charge should be made nurses for the breakage of appliances. That is a good plan, but are they consistent in it? How can you explain to a student nurse the fairness or justice of it when she knows that interns can break syringes by the dozen and are under no obligation, that the laboratory technician may drop the telephone on a glass desk top with disastrous results and feel no obligation, or the maids break an average of ten glasses a week and never give it a thought?

It is the most human thing in the world for a girl, who has not developed fully her sense of responsibility,

not to acknowledge that she has broken an article when she knows no one saw her break it. Then comes the question, if the article must be paid for and some nurse on the ward broke it, is it fair to split the responsibility and make the group suffer for the weakness of one of its members?

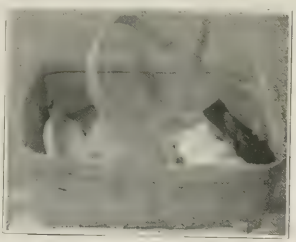
In various hospital reports you will find this statement or something similar: "Breakage or marring of hospital materials will be charged to those responsible." In most institutions the regulation is not consistently adhered to, however, and the individual, the type of article broken, etc., are all considered and the charges varied accordingly.

The fracture basket at Blodgett Memorial Hospital is filled with broken and worn out materials.

For some of the more commonly destroyed or wasted articles, the students are not nearly as much to blame as are the heads of departments. The power of example is far-reaching and when students see department heads doing many of the things they have been warned against, they grow lax; for example, lights burning in the offices all day when the sun is pouring in at the windows, or water left running in the pharmacy so it will be hot at the moment needed, heat turned on and windows left wide open. The training school aims to develop in its students their powers of observation, and some of them become very acute, particularly where it does not concern them.

The nursing department has little to do with the problem of dishes except to make a weekly inventory for the dietitian who keeps the supply up as needed.

Gauze and dressings are a great item of expense and are possibly the greatest article of waste in the department. At Blodgett Memorial Hospital the waste of gauze has been decreased decidedly by the following plan. All dressings are cut in a uniform manner in a central supply room. Then a definite amount to be folded is distributed by a night nurse to the various wards and by the supply room nurse to patients who need amusement. All dressings are looked over and wrapped in the supply room, then sterilized and stored. Dressings are requisitioned weekly as are the general supplies, so they are not allowed to accumulate. All dressings are resterilized weekly so there is scarcely a dressing used that has not been sterilized within ten days at least.



The same fracture basket being used to return new weekly supplies.

On the wards all dressings are emptied into paper bags which are sorted over by the night orderly. All usable gauze is picked out and sent in a mesh bag to the infected linen room where it is sterilized, washed and dried. The clean gauze is stretched and used over again for outside dressings or pads. The rest is burned. The grade of gauze used at present, 12x20 mesh, is not good enough to stand refolding for dressings.

Besides standardizing the dressings and having them handled in a uniform manner which has resulted in a saving of time and materials, two other advantages have been derived.

Some fifty surgeons have been won over to adopt three uniform dressings for use in surgery. These have been planned so that there is no waste in cutting, and two of them may be used over for other purposes as only new gauze is used for our operating rooms.

By not allowing the wards to order new gauze, the quantity used weekly has been cut in half, and the yards of gauze which were appropriated for mouth wipes, handkerchiefs, etc., are no longer a temptation, for paper mouth wipes, which are much less expensive, have taken their place.

Gloves are handled from the central supply by a daily exchange method. Only half the gloves used six months ago are in circulation today. Either our doctors are slowly being educated to the practicability of finger free technique for ordinary work or the gloves are kept in better condition with one person responsible for them. In either case, the expense to the institution is much less.

It seems that plans for the observation of our time and appliances are the vital consideration, and when these are carried out breakage and loss will become minor details and will take care of itself.

GOOD LIQUID BLEACH FOR LAUNDRY

A liquid bleach which is preferred by many laundry managers to chloride of lime, or bleaching powder, is prepared in the following manner:

(1) Thoroughly dissolve 25 pounds of caustic soda in containers, using three or four vessels of suitable size. (2) Put about 25 gallons of water into the jar. (3) Then add the caustic soda solution, being careful that no sediment enters. (4) Add water until the jar is almost full. (The mixture then will begin to generate heat, and it must be allowed to cool off before proceeding further. It is a good plan to do this preliminary work the latter part of the afternoon and let the mixture cool off over night).

(5) When the solution has cooled off, eight pounds of the liquid chlorine are slowly and gradually added. Open the valve a very little at first, and cautiously and gradually increase the flow, never letting it get so rapid that the gas will escape into the room. If there is an odor of gas, decrease the flow at once. Be sure to have the windows open to admit fresh air in case excess gas should accidentally accumulate. Remember that the liquid chlorine becomes a gas which is deadly and which therefore must be handled with extreme care.

The more rapidly the gas is admitted to the solution the more heat will be generated. Watch the scale, and close the valve to the tank as soon as eight pounds of the chlorine have escaped. First weigh the container, and then set the scale to balance at eight pounds less weight. If you forget to do this in the beginning you cannot tell when to stop in order to get a known strength of bleach.

It may take an hour to charge the caustic solution with the chlorine, or it may take more time, depending on how wide you open the valve. It is wise to proceed slowly for two reasons: a rapid flow of gas will cause an undue heating of the solution; second, a rapid flow of gas may cause a dangerous quantity of gas to rise from the solution and enter the air of the rooms.

This process gives a clear bleach which is pronounced

very satisfactory. If the jar is kept covered by users the bleach will not deteriorate rapidly. Approximately one pint is needed in a 36"x54" washer, and in other sizes the proportion may be the same. Be careful to use the least possible amount of bleach and do not bleach at high temperature. Bleaching in the suds is not good practice, for this one reason if for no other: If the suds bath is hot enough to get the best results it is entirely too hot for the bleach bath, for a hot bleach bath will be sure to damage the goods.

SMALL DRYING TUMBLER

Although a drying tumbler is one of the most useful pieces of equipment a laundry can have, the majority of small hospital laundries have had to get along the best they could without this machine. Some hospitals have been denied the use of this machine because they have no supply of high-pressure steam; other hospitals could not afford to buy the large steam-heated tumblers, which until recently were the only type available.

The small laundry which has no high-pressure steam may now operate a small gas-heated tumbler, as one of this type has been placed on the market and has been used with success for several months in the laundry of the Seton Hospital, Cincinnati. Laundries that have high-pressure steam but which cannot afford the more expensive types of tumblers will be able to heat this machine with steam instead of gas. Even the smallest hospital probably can afford one of these machines, for it costs only about $200 to purchase and install one.

The machine is designed for continuous service over a long period of time; in fact, it seems that it should last indefinitely. The cylinder is covered with a screening which is made of very heavy wire, and this rotating part, as well as the outer shell, is of sturdy construction. Power for both the cylinder and the fan is supplied by a small electric motor, which is attached to the lower part of the frame.

The capacity of the cylinder is 20 to 25 pounds of dry fabric, and it will dry two to four loads per hour, the time depending on the thickness of the goods. When gas is used for heating the machine, the temperature is automatically controlled by a thermostatic regulator, and thus danger of scorching the cloth is removed. The moisture passes off in the shape of steam vapor so there must be a pipe from the machine to a chimney or other opening.

The washing process, of course, is presumed to effect complete sterilization, but in case it should for some reason fail to do so, this machine should completely disinfect the goods, as it subjects the load to a temperature that is in excess of 212° F. If it is desired to use steam heat, coils may be inserted in place of the gas apparatus, and in this event the sterilization will also be effective.

When crated and ready for shipment, the tumbler weighs about 400 pounds. It is 42" high, and it only requires a floor space of 30"x38". As the cylinder revolves, a strong blast of heated air is forced through the goods by the fan. Thus the moisture is converted into steam and forced out through the pipe. Fabrics dried in this manner are given a thorough "airing," and one great advantage of this method of drying rests in the fact that the air "sweetens" the goods and also removes the odor of soap.

A heated tumbler is especially desirable for drying bath towels, blankets, comforts, feather pilows and many other articles. If dried in a tumbler, knitted underwear and similar pieces need not be ironed, and this saves considerable time. By partly drying the flat work in a tumbler

The above machine is heated by gas, but where there is a supply of high-pressure steam available the tumbler purchased should have steam coils instead of the gas burner.

the goods may be ironed more rapidly on the machine than is the case when the fabrics go direct from the extractor to the ironer. Where there is a single-roll flat work ironer this plan saves considerable labor and time, through making it unnecessary to pass pieces through the machine several times in order to "iron out" all of the moisture. In other words, by removing most of the moisture in the tumbler, and thus reducing to a minimum the amount of water the ironing machine must evaporate from the goods, the tumbler increases the output of the flat work ironer.

Even in a large laundry this small tumbler will be found useful, as there are many occasions on which it is desired to dry a small lot of goods quickly. Nearly every laundry has a small washer, to take care of small lots that are wanted in emergencies, and very often a small tumbler will be a great convenience when such an occasion arises.

NEW NAME FOR WOOD ALCOHOL

On account of the large number of casualties attributed to drinking liquor containing wood alcohol, the importance of surrounding its use with every precaution to protect human life has attracted attention for many years, and as a result numerous protective and restrictive measures have been adopted. One of these measures is the proposal to discontinue from usage the name "wood alcohol" and use the scientific term, methanol.

The term, methanol, came into scientific or chemical usage as a result of the action of the International Conference on Chemical Nomenclature which met in Geneva, Switzerland, in April, 1892. Although the report of the Geneva conference was published, the term did not come into favor in the American chemical profession until 1920.

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund of New York, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association 370 Seventh Avenue, New York

THE CURRENT TREND IN DISPENSARY PRACTICE*

BY C. H. GODDARD, M.D., ASSISTANT DIRECTOR, JOHNS HOPKINS HOSPITAL, BALTIMORE, MD.

FOR the dispensary director who feels that his organization is sound and ship-shape, as well as for him who fears that his is not, a comparison of practices in his own domain with those in vogue elsewhere never fails to be a source of profit. A recent study of conditions existing in some nine large dispensaries in three eastern cities, has proved so interesting and helpful to the writer that he feels a free discussion of certain moot points may be of more than passing interest to others whose problems are more or less his own.

The institutions visited operate under such diverse conditions that it is a practical impossibility to make comparisons between any two dispensaries (the terms dispensary and out-patient department are used synonymously) upon a common basis. Furthermore, in discussing various administrative features and enumerating their advantages and disadvantages, it has not been possible to separate into different paragraphs or under identifying headings statements of fact, comment, criticism and recommendations. An endeavor has been made, however, to make observations sufficiently concise and free from obscurity to nullify in large measure the handicaps arising from lack of a more set method in the presentation of the subject matter. It is well here to explain that all the dispensaries studied were well-known and highly rated, averaging 140,000 visits per year, their attending professional staffs being chosen from representative medical men. The conduct of these institutions may fairly be considered as exemplifying the most modern trend in the handling of out-patient problems. Certain of the more important of these are here discussed.

Clinic Hours

With regard to hours for admitting patients, one of two policies is generally followed. The first is to receive them all at a single (morning) session, the second to operate two sessions, one morning and one afternoon. When double sessions are maintained, different types of cases are ordinarily seen at the different hours, such as all surgical at one period, and all medical later, or general clinics in the morning, and specialties in the afternoon.

The average admitting period is approximately two hours, the shortest being one and one-quarter hours, and the longest two and one-half, excepting only one dispensary which keeps "open house" all day (from 8:30 a. m. to 6 p. m.). Of the "free" clinics, three list one session only, while four have two. Of the two "pay" clinics (one of which operates in conjunction with a "free" clinic in the same dispensary), one has evening hours only and operates thrice weekly, while the other, which runs daily, schedules three clinic periods, morning, afternoon, and evening, not all operative on any one day, however. A detailed schedule of admitting hours follows:

Single session free clinics	Double session free clinics	Pay clinics
1. 8:30-10 a. m.	1. 8:45-10 a. m.	1. 6:30-8 p. m.
2. 8:30-10 a. m.	1:00- 2:30 p. m.	2. 9-11:30 a. m.
3. 8:30- 6 p. m.	2. 9:30-11 a. m.	1:30-4 p. m.
	12:30-2:30 p. m.	5-7:30 p. m.
	3. 9-11 a. m.	
	1-3 p. m.	
	4. 8:30-10 a. m.	
	1-2:30 p. m.	

Average Fee Is 36 Cents

In recent years, the dispensary situation has become complicated by various changes which have affected the whole social structure of our modern civilization. Once catering only to the very poor, who could for the most part pay nothing at all for their treatment, the modern out-patient department of a large hospital in a great city now offers diagnostic and therapeutic advantages not found elsewhere, save by calling upon the services and equipment of expensive consultants. As a result, all social classes are becoming more and more aware of the facilities which a first-class dispensary affords, and abuses of dispensary privileges are more numerous and more flagrant. Similarly, operating costs are constantly mounting, and, unless an institution be heavily endowed, it is impossible to render public service for such nominal fees as formerly were charged. A study of dispensary reports for the past few years will show that an increased admission fee has been the rule almost everywhere since the war, some institutions showing two or more such increases. As a result, the average fee in the group of nine dispensaries now under discussion is thirty-six cents. This is 100 per cent or more higher than the pre-war figure.

The institutions studied have met the fee problem in various ways. The simplest solution is offered by the absolutely free dispensary of which our series offers one example. There no admission fee whatever is charged.

*Part I of Dr. Goddard's article. Two succeeding installments will appear in the July and August issues.

Expenses are met from municipal funds, the institution in question being under civic control. But the simplest solution is not always the best, nor is it possible to apply it save in isolated instances, as sufficient funds are not forthcoming. Most dispensaries *must* charge an admission fee in order to exist.

Next on the scale comes the so-called "free" dispensary, which is not free at all, save to those unable to pay the admission fee, which varies from ten to fifty cents. In this group fall seven of the nine with which we are concerned. These institutions accept the destitute and those for whom the regular fee appears suitable, but are frequently confronted with applicants from other economic classes—the really well-to-do, and the "person of limited means."

With the former the answer is simple. They are referred to outside consultants in their private offices. But the latter offer a more complex problem. They are willing and able to pay more than the established fee. They are unable to pay a consultant's fee, and they cannot get from the average "corner doctor" service equivalent to that which the dispensary could render them for the fee ($1 or $2 per visit) which they *can* afford to pay. How are they to be disposed of?

The answer is the "pay clinic," splendid examples of which are already in operation. The usual charge at present is one dollar per visit, with practically no "free" cases. Here we have eliminated the very poor and entered in a greater or less degree into competition with that type of practitioner whose fee is one dollar per office visit. The element of competition is still further accentuated by the fact that attending physicians in these so-called "pay" clinics are commonly recompensed for their services at rates varying from five to ten dollars per session, whereas workers in the "free" clinics (those charging up to fifty cents per visit) ordinarily receive no salaries. Such a clinic, therefore, approaches an instance of "group medicine" on a large scale. An important point of difference, however, is that in "group medicine" the members of a group gain their entire livelihood through their combined efforts, while the income accruing to those serving in pay clinics is but a fraction of their total earnings, their grouped efforts occupying, as they do, but a small portion of their time.

In conjunction with some of the pay clinics we find "diagnostic" clinics, where a person of moderate means may secure at the hands of a group of specialists a diagnostic survey for a flat fee of five or ten dollars (plus certain extras for x-rays, etc., if necessary). These clinics vary considerably in their character, some accepting only those who believe themselves well and wish to be satisfied on this point (health clinics), others admitting patients only when referred directly from private physicians, and after examination returning them to their physicians for treatment, while still others receive applicants on their own reference and carry out such treatment as examination may indicate. These clinics answer the problem which is presented by the class of patients who, living afar, travel to some medical center to seek a diagnosis for an obscure ailment. They are able to pay something, not much, and the fees of the average consultant would appall them. Time is an important element; they must get home as soon as possible, and the regular clinic routine with its lengthy "refers" from one department to another is too slow. The diagnostic clinic offering, as it does, a rapid, but careful, survey by a group of experts at a price within their means meets their needs precisely.

From an analysis of the types of clinics operated at the various dispensaries studied, it seems a safe prediction to state that within the next decade or two, every city of several hundred thousand inhabitants will boast, in addition to its usual quota of so-called "free" dispensaries at which nominal admission fees are charged, at least one pay clinic asking one dollar or more per visit and catering to the economic class lying between the really poor and the well-to-do, and one or more "diagnostic" clinics in which diagnostic surveys may be secured from a group of competent specialists at an outlay of five or ten dollars. A table showing types of clinics operated from the "cost-to-patient" standpoint at the nine institutions visited, follows:

Dispensary No.	Free clinic	Fee	Pay clinic	Fee	Diagnostic clinic	Fee
1	Yes	50c	None		Yes	$10
2	Yes	...	None		None	
3	Yes	40c	Yes	$1.00	Yes	5
4	Yes	50c	None		None	
5	Yes	25c	None		None	
6	Yes	10-25c	None		None	
7	Yes	25c	None		None	
8	None	...	Yes	$1.00	Yes	10
9	Yes	25c	Yes*	$1.00	Yes*	5

*Actually in operation though not officially developed or perfected.

At certain dispensaries, efforts have been made to sort out the clientele into classes which should:

a. Pay no fee.
b. Pay the usual nominal fee.
c. Pay $1.00 per visit ("pay clinic" cases).
d. Be sent to private physicians.

The most effective method, which is in use in two of the dispensaries discussed, consists in rating the applicant by a wage scale. This scale is worked out according to economic conditions and rates of pay prevailing in the city where the dispensary is located, and sorts patients into various classes according to the total family income and number of dependents. It is, of course, not inflexible but subject to numerous exceptions. Especially is it influenced by the probable *duration* of treatment in an individual case. Thus, he who, over a course of three or four visits would fall into class "D," lapses back into "C" when his illness is likely to be of some duration, and may even revert to "B" when it is evident that he is going to be rendered non-productive over a long period. However, it at least offers a basis to work upon in attacking a difficult subject, and when applied by a competent worker yields most excellent results.

Special Fees for Special Service

The tendency is at present toward increasing the *number* of items for which fees are charged. Whereas, not many years ago, the admission fee and prescription charges were about the only two items of expense to patients, the average dispensary of today assesses special fees for x-rays, Wassermanns, minor operations, casts, salvarsan, lumbar punctures, electrocardiograms, basal metabolism estimations, cystoscopy, baking and massage, and even, in some instances, for minor laboratory procedures such as blood counts. While practices in this regard are by no means uniform, certain services being given free in some institutions and charged for in others, and the cost of any one item fluctuating between wide extremes there seems to be a general feeling that expensive diagnostic procedures should involve extra outlay for such patients as can meet this without hardship, and fee schedules are being amplified accordingly.

Free passes are a subject which is open to much discus-

sion. As an aid toward handling it adequately the advantage of having a social worker at the admitting desk (vide infra) is obvious. Long experience enables her to separate the sheep from the goats, even better than can the medical administrator. Various practices for permitting free treatment may be summarized as follows:

Dispensary No.	Passes issued for	By whom issued	% of patients receiving free admission, 1920
1	1 day or 30 days	Admitting nurse & disp. director	20.2
2	All patients free	.....	All
3	One day only	Social worker admitting	23
4	Permanent	Social service department	?
5	Temporary and permanent	Social worker	13.5
6	One day only	Social Service department	10 (?)
7	One day only and permanent	Executive nurse	15
8	No free passes	.....	0
9	1 day to 30 days	Disp. director & admitting nurse	17 (?)

The free pass problem is one which apparently has not received adequate attention from dispensary administrators. The permanent pass is manifestly an unbusiness-like instrument. It assumes that the holder will forever be unable to meet the usual admission charges. Though he inherit a fortune, he still may receive free treatment so long as he desires. On the other hand, the pass limited to one day only is troublesome, for it requires at his every visit a new inquiry into the patient's economic status. This is time-consuming and mortifying to many patients as well. A happy medium is to give passes for periods of from one to thirty days—none longer. This enables the clinic to keep tabs on the individual, his case being reopened monthly, and to discontinue his free privileges when he gets upon his feet financially. Passes may or may not apply to medicines as well as to admissions. As the above table shows, they may be issued either by social service direct or by the admitting officer, both upon his own authority and following recommendations submitted by the social service. One institution employs in the latter instance a special form to be made out by the social worker and presented at admitting desk for counter-signature. This form also covers admission (and medicines) at *reduced rates*, as well as those strictly free.

Free Medicine

The percentage of free medicine issued ordinarily runs somewhat above that for free admissions. This is readily understood, when we realize that many patients visit the dispensary bringing with them just enough to pay the admission fee. When the time to receive their medicine arrives, they are without funds, and apply for remittance of the charge. Of course, the rates at which medicines are sold will control to some extent the percentage of free prescriptions. Practices in the dispensaries studied were as follows:

Disp. No.	Cost of each prescription	Amount of one prescription limited to
1	Sliding scale; aver. 60c	No limit defined
2	*No medicines issued* (Rx filled "outside")	.....
3	Average 50c	No limit defined
4	Up to $1.75	No limit defined
5	10c	12 tablets or 2 oz. fluid
6	15c upward	4 days' supply
7	5c	No limit
8	25c up	No limit
9	25c flat	8 oz. fluid, or 30 tablets

A study of the table shows that there is little uniformity of policy in the matter of fees for medicines. We go all the way from a dispensary which issues no medicines (all prescriptions being filled "outside") to one which practically gives it away at 5c per bottle (no charge being made for "refills," provided bottle is produced). It would appear that a flat rate for all prescriptions, so calculated as to pay cost of drug plus overhead (druggists' salaries, helpers' wages, etc.) is the simplest and easiest plan to follow. This of course taxes those who do pay for those who do not, but this is a situation which holds for every purchase we make. It also causes some to pay for one medicine more than it is really worth, while others pay less than actual cost.

A method fairer to the patient is to divide all drugs into two or more general groups, with a fixed price for each group. The larger the number of groups, the more nearly the cost of any given medicine approaches actual cost, but at the same time the complexities of the accounting system increase in direct ratio. Possibly a policy which embraced not more than three such groups might prove, as compared with the single fee system, so desirable from the standpoint of fairness to the patient as to recommend itself for general adoption. The point is one which merits further investigation.

There should, of course, be some limitation of the amount of medicine dispensed for a flat charge, and as a matter of fact, some such is in practice at all dispensaries, though it may not always be defined in writing. Practically all institutions make special charges in the case of drugs which are particularly high in price, such as luminal, pituitary liquid, etc., in an effort to cover actual cost. In the case of patients holding free passes, such drugs are, when possible, replaced by less expensive substitutes. This substitution is not made, however, when there is a chance of its retarding the patient's progress.

Machinery for Admission

It is interesting to note that, in the nine dispensaries discussed, the admitting officer, who differentiates patients according to their ailments, is in but one instance a medical man (and in this case it is a member of the professional, not the administrative staff, who holds the chair). At the first blush, this seems rather startling, but on further study, it is easy to understand. Differentiation of patients requires more tact than medical knowledge and is an art which can readily be acquired by an individual of average intelligence and education. The admitting agents in the nine dispensaries studied are as follows:

1. Head nurse of dispensary.
2. Clerical worker.
3. Social worker.
4. Clerical worker (chief file clerk).
5. Physician (member of professional staff, having no administrative duties).
6. Cashier (all clerks rotate at cashier's desk).
7. Clerical worker (cashier).
8. Social worker.
9. Head nurse of dispensary.

An objection to the employment of a woman as admitting officer is the fact that, unless she be both tactful and earnest in her demeanor, male venereals will conceal their true conditions and be assigned to the wrong clinics. This objection is a very valid one, where young girls of the clerical force do the admitting. But when a trained and competent social worker assumes the task, it fades into insignificance, as a short time spent at the desk of such a worker, during admitting hours, will reveal to the most

skeptical. The writer's study of the various practices in vogue in this regard led him to the conclusion that such a person is the best agent for assignment to this task. The work is of much importance and must be competently handled, yet it is of such a routine nature that it is poor economy to put a physician at it, especially one of the administrative staff, whose time can be spent at much more profitable pursuits.

Preventing Duplicate Registrations

A condition against which all dispensaries must constantly struggle is the registration of the same patient under two or more history numbers. A certain number of such registrations is inevitable for various reasons, among which we may enumerate the following:

1. Patient denies previous visits to the clinic because:
   a. He has lost his card of admission and wishes to avoid the penalty (usually a small fine) attached to such a loss.
   b. His last visit was so long ago that he has actually forgotten it.
   c. A long interval has elapsed since his last visit, and he now comes for a new complaint. He can see no reason why old records should be helpful in the present instance, and therefore, deliberately answers "No" when asked if he has ever been a patient before.
   d. He has, in the past, been denied further treatment by reason of infraction of some regulation and knows that his only hope to escape detection is to pose as a new patient.
   e. Charged items have been entered on his admission card for collection. To escape payment he destroys card and denies previous visits.
2. Patient states that he has been treated previously, but index card cannot be located because:
   a. He has changed his name since last visit (not uncommon in the case of recent immigrants of low mentality and of the colored).
   b. His name is practically unspellable in English, and is therefore written differently by each clerk who takes it down.
   c. Female patient has married, or remarried, since last visit, thus changing name, and fails to state this fact.
   d. Card has been misfiled, lost or destroyed.

To guard against duplications of the first type, the common practice is to quiz quite searchingly each patient who represents himself as a "new" case on the possibility of his having received previous treatment, whenever there is anything to indicate that such may be the fact. The best way of all is to look up in the index files, the names of all "new" cases, to make sure that they are not already registered. This takes a considerable amount of time, but the results justify the effort.

Duplications of the second type are more difficult to avoid, but careful questioning of the patients, coupled with a search for his card under every thinkable variation of spelling will produce results in the large majority of cases.

Segregation by Sex and Color

There is no general policy as to segregation by sex or color. In fact, no color segregation exists in any of the dispensaries under discussion. Farther south, such segregation is imperative and renders necessary either two separate staffs in each department, or attendance upon twice as many sessions by members of one staff. This duplication of effort is unfortunate, but not to be escaped.

As to sex segregation, various policies are followed. That which permits an intermingling of the sexes right up to but not into the private examination room may be said to be the most liberal, and that which involves the maintenance of entirely separate clinics for men and women, the most conservative. This latter system is in vogue at some of the largest and best equipped dispensaries studied. Just what advantages it offers to counteract the disadvantages attached to the maintenance of duplicate sets of clinic machinery and two professional staffs are not apparent. That privacy must exist in the individual examination we all admit, whether this be made in separate rooms or in a screened-off cubicle, but just why sexes should be separated on the waiting benches, or even in the rooms devoted to history taking, any more than they should be in street cars or railway stations is difficult to understand.

Appointment System

A system in vogue at some of the dispensaries visited is that of issuing appointment slips to those arriving after any one clinic has received a reasonable quota of patients for that day. These slips guarantee the holder an examination at some future session, provided he come at the hour indicated. They make it possible to forestall the congestion attendant upon a clinic where the patients are too many and the doctors too few. Under such conditions the physician, hurrying to get through, is naturally inclined to work fast, and the sick fail to receive his best attention. Both doctor and patients become disgruntled before the session is over and it occasionally becomes necessary to send away, untreated, some who have waited long hours, with directions to "come back tomorrow." This applies, of course, most particularly to new cases—those who must receive a complete physical examination; old cases can usually be seen in almost unlimited numbers, but here again if they are to receive the best of attention, a strict limitation should be established.

It is always possible to judge fairly accurately the number of new and old cases that any one clinic can handle in a single session, given the number of doctors who will be in attendance and the approximate length of time that each will be able to stay. This number known, the admitting officer and cashier pass that many new and old patients, and no more. Thereafter all applicants receive appointment slips for future sessions. Obviously, the regular issuance of such slips for any one clinic shows that the clinic is undermanned and indicates an increase in its personnel. In other words, the use of appointment slips should be in the nature of an emergency, rather than a routine, measure. This brings us to a discussion of priority.

Priority of Patients

A troublesome question in the administration of all dispensaries is the fact that many patients arrive early and are not seen until late, others being called for examination before them. This naturally causes discontent and complaint. In five of the nine dispensaries studied, some attempt is made to correct this. The ordinary method is to give to patients for each individual clinic, numbered slips in order of their arrival, these to be called for serially by the clinic secretaries.

But it is by no means possible to make this system work perfectly. For instance, one case may be of especial interest, and his physician, seeing him, will insist on calling him in at once. Another may be an old neurasthenic, with a new complaint each time, troublesome and uncooperative. It will be human nature to put him off until last, and then give him short shift, though he may have been the first within the doors. The fact that *when possible*, "first come" should be "first served" has, however, been pretty definitely recognized by dispensary administrators, although possibly less so by the professional staffs. This is a point of common fairness which will continue to receive more attention in the future.

ESSENTIALS FOR A HEART CLINIC

Report Prepared by HAVEN EMERSON, M.D., Chairman, Executive Committee, Association for the Prevention and Relief of Heart Disease, Inc., New York.*

NOW that there are 105 special dispensary classes in the hospitals in the United States and Canada offering particularly thorough diagnosis and treatment (and the educational and social services) for prevention and relief of heart diseases, it is suitable that a brief statement be made expressing the result of experience in this field.

This has become the more necessary since the last annual meeting of the American Hospital Association at Atlantic City where, under the auspices of its committee on dispensaries, a demonstration of the arrangement, equipment and uses of a heart clinic was given by the New York Association for the Prevention and Relief of Heart Disease.

Cities	Clinics	Weekly Sessions
Albany, N. Y.	2	7
Boston, Mass.	6	6
Buffalo, N. Y.	1	1
Chicago, Ill.	9	13
Cleveland, O.	3	4
Davenport, Ia.	1	1
Des Moines, Ia.	1	1
Detroit, Mich.	1	1
Fall River, Mass.	1	1
Hot Springs, Ark.	1	3
Indianapolis, Ind.	1	1
Iowa City, Ia.	1	1
Memphis, Tenn.	1	1
Milwaukee, Wis.	1	1
Minneapolis, Minn.	2	4
Montreal, P. Q.	1	1
New Bedford, Mass.	1	1
New Haven, Conn.	3	3
New Rochelle, N. Y.	1	1
New York, N. Y.	43	56
Philadelphia, Pa.	15	19
Pittsburgh, Pa.	3	3
Rochester, N. Y.	1	1
St. Louis, Mo.	2	5
San Francisco, Calif.	1	1
Toronto, Ont.	1	1
Worcester, Mass.	1	1
Total	105	139

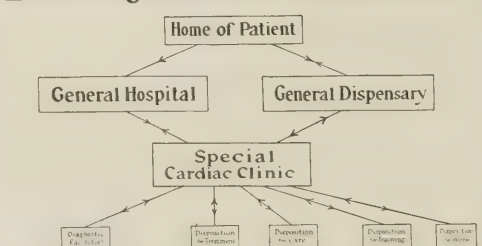
There are 105 dispensary classes in twenty-seven cities in fifteen states and in Canada, in seventy-eight hospitals, holding 139 sessions per week.

In New York City alone there are now given every week 305½ hours of medical dispensary service for heart patients, *i. e.*, the number of hours of clinic sessions each week times the number of physicians in attendance amounts to 305½ physician-hours of service per week or five physician-hours per week or five physician-hours of clinic service for every 100,000 people. The place of the heart clinic in the scheme of service which binds the patient in a protecting net of professional skill, is shown diagrammatically in the accompanying illustration.

This article may serve to answer many of the inquiries which developed out of the interest shown in the demonstration.

*Material collected by Miss M. L. Woughter, executive secretary, Association for the Prevention and Relief of Heart Disease, Inc., New York.

Plan of Organization for a Heart Clinic



As a special section of a general dispensary, the relation of the heart class is no different from that of any other of the special sections such as pediatrics or tuberculosis, *i. e.*, subject to the administrative direction of the dispensary executive or committee of the dispensary staff. If the heart class for adults is under the medical clinic chief, or the heart class for children is under the pediatric clinic chief, the physician in charge of the heart class will of course be responsible to the chief of his clinic department and not directly to the dispensary executive. It is expected that there will be at least one session a week and that one nurse or paid professional social worker will be provided for each 100 of active cases. Volunteer social workers are desirable in addition to clerical and filing service for records and correspondence.

In the heart clinics in New York City at present, the number of nurses or professional social workers falls far below the desirable minimum found to be necessary for adequate follow-up of patients. For the 5,946 active cases attending the special heart clinics, there are only twenty-four nurses or paid social workers regularly on duty. In only four of the clinics does the ratio of medical social workers to patients approximate the desirable one to 100.

The number of patients should be limited according to the time of the clinic sessions and the number of physicians in attendance. Not more than four new or six old patients should be accepted for each hour of physician attendance provided.

The accompanying illustration of a heart clinic in operation will show the need of providing space for the associated workers—the doctor and social worker, the mother and the patient at the same time and place.

No plan of an ideal arrangement of rooms and space for the purposes of a heart clinic is offered as each hospital or clinic will have to adapt existing facilities to meet the special needs of such a class, which are but little different from those required in general medicine.

A waiting room or space is required, which may be small, *i. e.*, adequate for not more than four patients if the appointment system for patients' calls is in effect.

A preparation or history room is necessary where the social history may be taken and the pulse, temperature, respiration, height, and weight are recorded by the nurse.

There are needed also a dressing room and an examining room, the latter light and quiet.

The simplest furniture suffices for the examining room. A low table or couch, for recumbent examinations, a screen, a table and chair for the physician and two extra chairs.

There are needed a stethoscope, measuring tape, blood pressure apparatus, scales, thermometer, tongue depressors, head mirror, artificial illumination.

It is presumed that any hospital or dispensary, with an amount of traffic to justify specialization for ambulatory heart patients, will have available facilities for fluoroscopic and x-ray diagnosis, possibly also but not necessarily, for polygraphic and electrocardiographic records, and convenient access to rhinological and dental services, and to clinical, pathological and serological laboratories.

Value of Special Heart Clinics

The value of such specialization as is nowadays provided in heart classes of general dispensaries to patient, physician, hospital and community are already evident.

For the patient, the results appear to be the following:

(a) Early, accurate and adequate diagnosis by particularly interested and competent physicians.
(b) Expert consultation service with other specialties, e. g., nose, throat, teeth, etc.
(c) Systematic and continuous medical management.
(d) Diminution in frequency and length of hospital bed care.
(e) Education in home management, and welfare supervision.
(f) Prevention applicable at the most favorable period in potential cases with tonsillar, dental, rheumatic or choreic infection.
(g) Appropriate convalescent and country care, arranged for where necessary to prevent unnecessary disability.
(h) Occupational therapy and vocational training.
(i) Life of maximum activity compatible with physical condition
(j) Self-support through supervised occupation.
(k) Increased happiness and usefulness by release from fear of sudden death and doubt as to permitted exertion.
(l) Prolongation of life.
(m) Improved mental attitude toward a chronic handicap.

For the physician, concentration upon one group of patients permits him to obtain:

(a) Maximum of experience in the shortest time.
(b) A medical organization suited to his needs.
(c) Association with other experts for sharing both opportunities of research and diagnostic responsibilities.
(d) Quick results from trials of new methods, by virtue of the amount of special material to study, and records available for comparison with those of other heart clinics.

By appropriateness of facilities and the finer analysis of patients by classes, the heart clinic *benefits the hospital* through economy of time and effort, by reducing the days of bed care for heart diseases, by coordination of special departments, by developing interest, enthusiasm and morale among patients and hospital staff in this field, by enlarging the usefulness of the entire plant and personnel through better understanding of the problem and a more intelligent direction of the patient's career.

The community gains as it has through the educational force of the 568 special tuberculosis clinics throughout the country. A quicker, more responsive, more continuous, complete and hopeful service always gains the confidence of the public. The special heart clinic becomes an educational center for preventive propaganda. The reports of unlooked for restoration to health, and return from convalescence to self support tend to bring hesitating persons fearful of existing trouble as impending incapacity or suspicious of a heart defect, to obtain relief from anxiety. It becomes an influence in the campaign for sound teeth, for removal of diseased tonsils, for respect for rheumatic pains, and for adequate rest during convalescence after all acute infections. It serves the schools, industries and institutions as a source of standard methods, classification and advice for their serious problem cases among heart patients.

Cardiac Clinic at St. Luke's Hospital, New York.

The special heart class in dispensaries has already begun to specialize within itself and we have not only the particular problems of children and adults handled apart but we have the syphilitic group separated for study, diagnosis, management, education and control from the rheumatic or acute infection group, and again these from the cardiac neuroses and functional disorders.

Already the dependence of the medical school inspection service, the school superintendents, the trade schools, the employers, the general clinics, the convalescent homes and the relief agencies upon the heart clinics in New York City is such that a serious dislocation of medico-social undertakings would occur if they were abandoned.

Monthly Reports of Services

By a system of monthly reports similar to those rendered by the thirty-one constituent members of the Association of Tuberculosis Clinics in New York, much accurate information as to seasonal incidence, need of follow-up, extent of possibly secondary or contact infections in the families of cardiac patients, cost of service, needs of growth, etc., are being assembled.

During the past six months there were, from month to month, 5,946 patients on the active list of the forty-three heart classes in New York City. In the past nine months 26,375 separate visits have been made by patients attending the heart clinics in New York City.

Cost of Special Heart Clinic Services

The cost of continued dispensary supervision of patients with permanent organic and more or less disabling heart disease is about $15 a year per patient, if there are as many as 200 patients on the active list of a heart clinic and if the clinic physicians receive no salary for their dispensary work.

The investment brings quick returns in terms of lowered costs for hospital care of these heart patients, so frequently repeaters in medical wards, in increased earning periods and capacities of adult patients, and in more continuous school attendance of children.

NEW USE FOR ARMY CANTEEN

An aluminum regulation army canteen has been found by some hospital superintendents to be an effective substitute for the perishable hot rubber bottle. These canteens prove very satisfactory in the heating of anesthetic beds, hot-pack, and many other uses, as they are almost indestructible in holding heat if filled with boiling water from 12 to 18 hours.

OCCUPATIONAL THERAPY AND REHABILITATION

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WHY ONE PHYSICIAN APPROVES OF OCCUPATIONAL THERAPY IN GENERAL HOSPITALS

BY PETER BASSOE, M.D., ATTENDING PHYSICIAN, PRESBYTERIAN HOSPITAL, CHICAGO.

THE present attitude of physicians toward occupational therapy is somewhat varied. Perhaps the majority have given little thought to it. Others approve of it very much in the same manner they approve of concerts, religious services and picture shows for hospital patients, considering it a useful diversion which helps to entertain the patients and to make their hospital stay less irksome. Still others look upon it as a valuable addition to treatment but as something rather apart which very well can be entirely delegated to others to manage without the personal cooperation of the physician. On the part of many medical men there is a certain aloofness and conservatism which makes them slow to admit that anything of real therapeutic value can be administered by others than themselves. However, those who have investigated the matter more closely generally admit that such treatment has a distinct value as such and that it warrants the same careful observation on the physician's part as does treatment by drugs and other old and conventional agencies.

Let us for a few minutes consider the real logical and common-sense basis of occupational therapy.

Outside Influences Affect Patient

A sick or injured person, when we take a broader view, is a human being whose habitual activities, physical or mental, or both, have been forcibly altered or suppressed on account of something undesirable happening to some part or other of his biological machinery. When such interruption of desired activity is caused by physical injury or by some agency either not understood by the person concerned or recognized by him to be beyond his own control he asks the aid of his medical adviser. The first duty of the latter is to discover the injurious agent and to repair the damage done, be it by surgical or medical means.

After this has been accomplished as far as possible, the patient may for a long time or permanently be left with a certain disability, either physical or mental, and because of this he faces the problem of reconstruction or readjustment. His future happiness and usefulness largely depend on the spirit with which he attacks this task, and on the outside influences, be they good or bad, which are brought to bear on him. At one extreme we have the exaggerator, the compensation seeker who feigns greater disability than he really has in order to get more money in damages or pension than his condition really warrants. To attempt any kind of reconstruction with such a person is usually futile until the claim is settled one way or another once and for all, so he no longer has a motive for making himself worse than he is.

Helps to Prevent Invalidism

Even in the absence of any such motives it is natural for a great many people to lay themselves down in the face of difficulty, to give up, curse or weep over their bad luck according to what their habit may be. Such people need help very badly and have to be shown that all is not lost. And the few brave ones, when the handicap is considerable, are entitled help to hurry up the reconstruction which it might take them long to work out by themselves. There is no question but that the key to the situation is the mind and morale of the patient. He must at all costs be saved from the all too frequent "invalid reaction." What is really an invalid? Webster's dictionary defines him as "a person weak and infirm; especially one in ill health." Now, weakness and infirmity are relative terms. Even the healthiest of us are weak and infirm in some manner or other, aside from any local disease or injury, and if we concentrate on these weaknesses for any other purpose than to overcome them we make ourselves invalids just as effectively as if we were actually ill.

Invalidism really is a state of mind in which one's thoughts constantly dwell on one's shortcomings and defects in such a manner as to stifle constructive and productive mental and physical activity. Hence invalidism, like hysteria, is a mental state produced by evil suggestion from within or without, and like hysteria, it can be cured by persuasion and constructive suggestion. Hysteria and allied states of fear, indecision, feeling of inadequacy and general misfitness or unfitness can largely be prevented by healthful surroundings and the cultivation of sound mental habits of meeting difficulties squarely, disposing of trouble as it comes along, and making the best use of the means at one's disposal. A similar attitude taken promptly in the face of disease or injury will prevent the formation of the invalid complex and thus greatly facilitate the task of physical reconstruction.

In the writer's opinion nothing serves both purposes, prevention of the invalid reaction and reconstruction, as admirably as occupational therapy, which aims to help

the patient to help himself and to utilize his own resources so as to maintain and strengthen his self respect. In the kind of cases with which the writer is most familiar, victims of nervous disorders, compare the results of occupational therapy with those obtained by other methods. This does not mean treatment directed to the cure of disease as such, but the use of measures to enable the patient to employ to best advantage the physical and mental possibilities which remain in him; in other words, his reconstruction. Hypnotism or waking suggestion by the physician, whom the patient is made to believe to be possessed of great mental power, may bring quick and striking results but it is at the expense of the patient's self respect and independence. An outside power has saved him and he is left an easy victim to formation of new imaginary ideas of incompetence; his initiative and courage are weakened rather than strengthened. Physical agencies, such as electricity when used for their mental effect, have the double drawback of producing a feeling of dependence on somebody else and of making the patient think he was cured of a physical ailment which really was non-existent.

Patients Need Occupational Therapy

Many nervous patients are told they need "rest and change," and in a few instances it is true. More often, as has been well said, the doctor gets the change and the hospital or sanitarium the rest, the patient being left broke—and broken in spirit. The nervous invalid may be compared to a man who has failed in business but has saved a pittance from the wreckage. He may go away where living is cheap, but where opportunities of earning anything are correspondingly low, and exist on what he has left; or he may renew the struggle where he is, strain every nerve and use his remaining resources to build up his business once again. There can be no question as to which alternative makes for the greater self respect and strengthening of character. Occupational therapy does this very thing; it teaches the patient self-reliance and independence and strengthens his character by causing him to realize with pride that he has been the architect of his own reconstruction and that his own powers have carried him through a crisis in his life.

Doctor Should Keep in Touch with Treatment

Especially in functional nervous cases it is important for the physician to keep in personal contact with the occupational treatment, and at least make the patient think that he directs it, that he has selected the tasks most suitable for his particular ailment and regulates the amount of work he should do every day just as the physician selects the kind and quantity of drug administered. To succeed in the treatment of neurasthenic and hysteric patients it is necessary to make the patient feel that he is the object of the physician's particular attention. It is, therefore, wise for the physician to keep in close touch with the therapy in such cases. These patients are very self-centered and occupied with their worries and fears. A mode of treatment which furnishes them with an activity outlet that directs part of their attention away from themselves is most desirable. Furthermore, the patients frequently learn something which they can turn into much needed money later, or, what is equally important, they acquire a hobby which may serve them well in the future as a means of preventing recurrence of nervous exhaustion. The writer has seen a large number of neurasthenic business men who have had to give up work and who feel utterly lost because they have no interest outside of their business. A hobby of some sort may save such men, and a chance stay in a hospital with an occupational shop may give them a start.

The physician's cooperation is also highly desirable in cases where there is need of reconstruction of particular local functions, for instance, in cases of neuritis with partial paralysis of the fingers or hands, of paralysis following a stroke, or injury to the brain. For the finger cases experience in army hospitals has shown modelling in clay to be particularly valuable. The closer physicians and surgeons keep in touch with this work, the greater the benefit to the patients and to the doctors.

Doctor Bows to Shop Foreman

The writer was early impressed with the importance of occupation in the treatment of the insane. Twenty-five years ago when serving as assistant physician at a state hospital in Iowa he had lessons never to be forgotten. All patients, no matter how demented, were made to do some work if it was in any way possible. There was a large choice, as the institution had a large farm as well as carpenter shop, paint shop, sewing rooms, etc. The superintendent ordered the work to start early in the morning, and patients were not to be kept in for the purpose of medical visits, for as he said, it did them more good to be out working than to see a doctor. We did see them, however, by walking around wherever they worked. It was a little humiliating because of this belittling of medical activity and because the shop superintendents had greater authority in selecting patients for work and work for the patients than the physicians.

Closer cooperation between occupational workers and the hospital physicians should exist and enlarged shop facilities should be provided so as to accommodate out-patients who no longer need to stay in the hospital for other purposes. Hospitals which have out-patient departments, or are connected with medical schools having large free dispensaries, should have accommodation for both classes of patients. This has been carried out with success at the Barnes Hospital, connected with the Washington University Medical School in St. Louis. In addition there should be constructed just outside of the larger cities convalescent homes with hundreds of acres of truck farm and gardens and shop activities of all kinds, maintained and managed by the united effort of several metropolitan hospitals, from which patients could be transferred. Such an institution would be a tremendous factor in reducing invalidism, restoring the earning capacity of patients, and it ought to be possible to make it practically self-supporting. If started on a small scale it could be enlarged largely by the labor of the patients and thus doubly become the worthiest monument possible to occupational therapy.

THE ROLL CALL

Training for occupational therapy was discussed in the April number and a list of training schools and courses published. This month the states have been requested to tell of training given to nurses and attendants who have not been prepared in the training schools for occupational therapy.

Illinois

Presbyterian Hospital, Chicago

At Presbyterian Hospital, Chicago, nurses in the training school are given a three weeks' course in the occupational therapy department during their probationary

period. The object of this course is not primarily to teach the crafts but to make the nurses cognizant of the fact that there is such a thing as occupational therapy and that it contributes to the well-being of the patients and assists in their recovery. To this end a definitely outlined craft course is followed, consisting of two problems in basketry, one problem in leather work and one problem in wood work. The nurse first learns all the weaves in basketry. As soon as she learns even pairing weave, or how to fasten spokes into a base, she puts this knowledge into practice in helping the patients. The same thing is true in each line of work because the real test of knowledge is its usefulness. Throughout the course emphasis is placed upon the fact that to be therapy, occupation must be "definitely prescribed and guided." The nurses are provided with printed notes on occupationary therapy and with a bibliography of reference books on this subject and on the various crafts.

St. Luke's Hospital

St. Luke's has been giving training to the student nurses in class instruction but they get no actual practice in it. The hospital has recently started classes for graduate nurses and other hospital attendants. On several different occasions instruction has been given to patients when they have desired it. Volunteer helpers are getting training here all the time and this year there is one student taking occupational therapy training who expects to take it up as a profession.

Kankakee State Hospital

So long as trained occupational therapists could not be obtained from a regular training school, Kankakee State Hospital set about to train some of the attendants.

"We found on making a survey of them, very few had had any high school work," writes one of the officials. "Those were chosen who seemed the most fitted for this particular service and who had the best educational background, together with the required experience on the wards.

"In the beginning classes were held for the new attendants in the department. They were given talks on occupational therapy in order to give them as broad a vision of the work as possible. We had classes for them in basketry, all kinds of rug making, toy making and more difficult wood work, clay, caning, brush making, knotting, and other subjects with which they should be familiar.

"They were given lectures on such subjects as 'Types of Mental Diseases,' 'Causes of the Principal Forms of Mental Diseases,' 'Nerve Control, How to Obtain It and How to Lose It,' 'Feeble Mindedness,' 'General Paralysis,' 'Tuberculosis,' 'Contagious Diseases,' 'The Nervous System in Relation to Mental Illness,' 'Abnormal Reaction from a Behavioristic Standpoint among Persons not having had Proper Medical Treatment,' and many other vital subjects.

"We have endeavored to raise the standard of the personnel of the department to as high a plane as possible. As a rule when an attendant has been placed in the O. T. department, she remains indefinitely, consequently we have discontinued the classes for the new members, as it would be a very difficult matter to conduct these classes for one person at a time.

"Now when a young woman comes into the department, she is sent to a class where she may observe and be taught the different crafts used for that particular group. When she has mastered what is taught in one class, she is placed for a time in another in order that she may learn the problems there and how to present them to the different types of patients.

"When an attendant has been in our institution for six months she may then be considered an available applicant for the O. T. department. After being in that department for six months and passing the examinations required by civil service, she becomes a charge attendant and receives a small increase in salary.

Chicago State Hospital

The Chicago State Hospital at Dunning does not maintain a "school" for the training of Occupational Therapists, but it is never without some women who are obtaining their training within its walls.

Fundamental and indispensable are the personal traits which insure an insight into the normal and abnormal mind and an intelligent and kindly toleration of vagaries which are often annoying, a readiness to shape discipline and instruction according to the limitations imposed by the many and varied types and degrees of mental and physical disability encountered.

Next to the character and temperament qualifications comes education. This includes not only schooling of the highest grade—most of the therapists being college graduates—but travel in this and other countries, previous teaching experience and a wide acquaintance with men and women eminent in their chosen fields; to this if possible is added service among the sick and afflicted.

When this material is found, either wholly or largely, in an individual the Chicago State Hospital welcomes her and assigns her to ward duty as a pupil of occupational therapy. The progress is generally from the bottom, beginning with the habit training which teaches slovenly patients the rudiments of personal cleanliness and neatness, continuing through the kindergarten ward and progressing to other wards where useful occupations are taught under the supervision of a trained therapist.

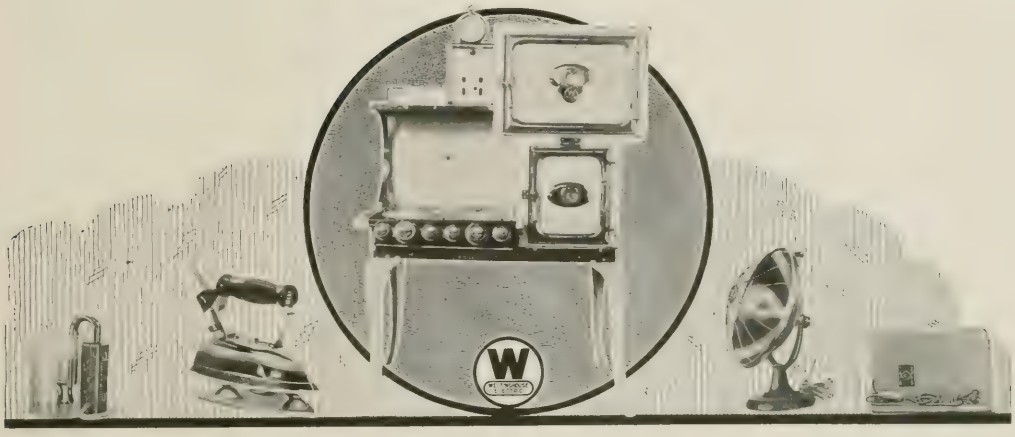
Occupations are graded according to the abilities of the patients into three classes, "A," "B" and "C"; below these are the habit training and kindergarten groups. In the former besides a tooth brush drill, and regular visits to the bathroom, there are classes in the most elementary occupations, dressing paper dolls, stringing bits of colored paper together, etc.

The kindergarten is a step ahead of this and includes the same occupations, weaving on cards, outlining simple figures of animals, fruit and flowers on white muslin with bright colored thread, putting together picture puzzles and an hour in the gymnasium with exercises, dancing, swinging from rings, jumping over obstructions, etc. A story telling hour precedes dinner and while the stories are simple the patients are called upon to retell them, to spell many of the words and to draw pictures on the blackboard of the principal articles mentioned. There is also a period of mental arithmetic and there is always a phonograph to provide music for ward marching.

The occupations taught in Class C are: ravelling, winding, tearing, sorting, cutting, sewing, weaving, pasting, modelling, painting, stringing beads, sandpapering, spool knitting and sewing.

In Class B: cutting, rolling, modelling, sawing, stick printing, rake knitting, pasting paper beads, rolling paper beads, painting, enamelling, gesso, braiding, tea matting for hats, raffia, silk rags for rugs, stuffing dolls, hammock netting, etc.

In Class A: painting (advanced), drawing and lettering, bead work on looms, block and stick printing, caning, tin work, crepe paper flowers, tracing, cutting, knotting and tying, stenciling, weaving, basketry, pasting,



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During the period of practice with patients in ward and classrooms, the candidate attends several courses of the lectures given in the psychiatric training school; among them psychology, psychiatry and mental hygiene, and in conjunction with these lectures clinics in which demonstrations with actual cases drive home the knowledge acquired in the lecture hall.

Furthermore Chicago, with its evening high schools, the Art Institute, Hull House and other educational resources, offers all who seek them amplified courses and extended practice in all the arts and crafts suitable for use in occupational therapy whether for the mentally handicapped or for the tuberculous, the cardiac or the orthopedic patient.

In addition to the candidates for the occupational therapist certificate, promising young women of average educational attainments are selected from among the attendants are taught enough to make them efficient aides, although they rarely qualify as full fledged occupational therapists because of their natural and educational limitations.

Manitoba

The mental hospitals are requiring their nurses to get an intelligent idea of the work. The superintendent of nurses in the general hospital in Winnipeg is trying to get some kind of training for her nurses.

Maryland

Johns Hopkins Hospital, Phipps Psychiatric Clinic.

Johns Hopkins Hospital gives a two-weeks' course to all pupil nurses in training at the hospital; included in this training are basketry, weaving, painting, book-binding, wood work, leather work, etc. Postgraduate nurses often returning to Phipps are allowed special time in the O. T. department. Volunteers receive teaching experience in the dispensary but no volunteers are allowed in the clinic.

Sheppard and Enoch Pratt Hospitals.

At Sheppard and Enoch Pratt Hospital pupil nurses receive a two-week course in O. T., the nurses being allowed to choose in which crafts they prefer to specialize. In this way they can realize the great value of O. T. work and have a sympathetic understanding of its use and can promote its spirit in either hospital or home nursing.

Massachusetts

So far as can be judged from data at hand it would seem that in the majority of Massachusetts hospitals where there is a recognized training school for nurses, occupational therapy has a place on the program. The time given to it, however, varies from two lectures on the subject, merely for the purpose of familiarizing the nurse with the principles and value of occupational therapy, up to thirty hours with practical demonstration and lessons in crafts. In these latter courses the nurse is taught the simpler crafts with the view of giving occupation to patients for diversional and therapeutic purposes as an aid in her nursing care. There is no idea of graduating nurses capable of becoming therapists.

In Massachusetts State Hospitals for Mental Diseases alone is there sufficient occupational therapy training given to graduate therapists? The budget of these hospitals allows three therapists to each hospital, but where the occupational therapy department has developed extensively and there is need for more aides, attendants with craft ability or interests are assigned to the department and trained for the work. These girls, who give from eight months to two years of their time, are by training and experience capable of filling therapist positions when leaving the hospital. Patients are also taught to help in work on the wards, but these are as a rule chronic cases, and though of value to their institution could not be placed elsewhere. There are, however, one or two individual cases where patients have been trained and cured and are now teaching occupational therapy in other hospitals. In all these state hospitals, there is a prescribed occupational therapy course of twenty hours given to all nurses in training. This is sufficiently comprehensive to make the nurses intelligent, sympathetic and cooperative with the work, and also gives them practical knowledge of the simpler crafts.

The following is an outline of the course in occupational therapy given in the training schools of Massachusetts state hospitals for mental diseases. The course consists of five hours of lectures and fifteen hours of demonstrations and practical work.

LECTURE I.

History of the development of work cures.
Conditions in which occupation is particularly indicated as a therapeutic agent.
Mental and physical effects of occupation.
Psychological and physiological processes involved.
Economic and moral aspects of occupational therapy.

LECTURE II.

Factors to be considered in choice of occupations for patients:
1. Their physical condition.
2. The nature of the disease or handicap.
3. Duration of the disease.
4. Mental and manual equipment.
5. Age, previous life.
6. Personal taste.
7. Capacities, etc

LECTURE III.

Main types of patients to be considered.
Types of occupations suitable for the sick and handicapped. Therapeutic value of work.
Sedentary work—Embroidery, knitting, crocheting, tatting, basketry, etc.
Active indoor work—Housekeeping, loom weaving, cement work, etc.
Outdoor work—Gardening, farming, photography, etc.
Recreations.

LECTURE IV.

Given by occupational therapy teacher.
1. Equipment and material.
2. Requirements for commoner occupations.
3. Practical possibilities for the general hospital patient.
4. Private cases.
5. District work.
6. Prices and purchasing supplies.
7. The use of waste material.
8. The disposal of products.

LECTURE V.

Methods of teaching:
Class teaching.
Bedside teaching.
How to secure interest and cooperation.
Need of careful planning and preparation.
Importance of variety.
Dangers of overdoing.
Cultivation of originality and initiative.
Development of the artistic sense.
Value of appreciation and commendation as incentives.
Encouragement of social motives as opposed to commercial or individualistic concrete problems provided.
Helping real people.
Perfection in workmanship comparatively unimportant.
Educational and therapeutic results primary objectives.

Minnesota

The state advisory commission for tuberculosis sanatoriums has a worker who spends several weeks at the different county sanatoriums, and at each of these she has patients helping her. These patients through her help and instruction are often able to carry on the work very successfully in her absence.

The University Hospital gives its student nurses a course of lectures in occupational therapy and also requires that they observe the occupational work in the hospitals with which they are affiliated.

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Missouri

In the hospitals of Missouri, the departments of occupational therapy are, at present, under the direction of a graduate therapist, and attendants are trained by her to carry on the work under her direction. Mount Vernon has a small, but efficient department. At St. Joseph there is a chief therapist and eight attendants detailed to and trained by her. At Fulton, there is a chief therapist and four trained assistants, and at this hospital the wives of the resident staff are sufficiently interested so that they give considerable time and service to the department. At Nevada there is a chief therapist and two male assistants, and while the work is still young, it gives promise of good development.

In the St. Louis hospitals it has been customary for the superintendents to detail from two to six attendants to the occupational therapy departments. These attendants help the patients and incidentally imbibe a little themselves, but they are not there for the purpose of training primarily. In one case, however, an attendant who has been in charge of the patients in occupational therapy workshop for over two years might very readily be termed a "practical" therapist.

The Junior Red Cross loaned us the Bakule chorus of forty crippled children from Prague, Czecho-Slovakia. They were guests and entertainers at our annual luncheon, and on the day following, Tuesday May 1, they gave a working demonstration with an address by Professor Bakule, under the auspices of the M. A. O. T. in the auditorium of the Washington University school of medicine.

New York

Montefiore Hospital

A short course in occupational therapy is given to nurses in training at Montefiore Hospital in their senior year. This course conforms to the maximum requirement of the standard curriculum for schools of nursing.

The object of the course is not to prepare the nurses for occupation therapists but to enable them to cooperate intelligently with those who prescribe and administer this form of treatment and to show the possibilities of specialization in the form of treatment. It is comprised of ten lectures and at least twenty hours devoted to manual work in three or more crafts.

The lectures cover the history of occupation therapy and the field of its application, the therapeutic educational, and economic value of certain type occupations, organization and administration of an occupation department, equipment and materials, and methods of approach and presentation of subject matter. They are illustrated by observation and study of individual cases.

Pennsylvania

The opportunities for training in occupational therapy given to nurses and attendants in the various institutions throughout the state of Pennsylvania are being extended very rapidly. In the Visiting Nurse Society of Philadelphia, the director of the department speaks at each staff conference in order that the nurses may more thoroughly understand the importance of the work. Also the aides always talk over the individual cases with the nurses in charge. In this way the staff has a most sympathetic attitude toward this work. At the state institution for feebleminded at Polk, attendants who are interested in this kind of work are frequently assigned as attendants to the various classes and a majority of the teachers have received their training in this way. The attendants at Elwyn receive similar training.

Philadelphia General Hospital

In the Philadelphia General Hospital the subject of occupational therapy is twice brought to the attention of the nurses during their period of training.

All the probationers have a four-hour course which consists of two lectures on the subject explaining the psychological reasons for using work as a curative measure, the advantages to the patient and to the hospital of occupational therapy and the reasons for giving handicrafts and one hour excursion to the shops to observe the patients working and an examination.

In the senior year the nurses have an eighteen-hour course in hand work and theory with an examination at the end of the course. A more scientific presentation of the significance of occupational therapy is possible with these more mature and experienced students. Other lines of work allied to occupational therapy are discussed, prevocational training, the best method of helping the permanently handicapped to earn a living, etc. The practical work includes the raffia stitches (one finished basket being required), a coil reed and raffia basket, the Solomon knot with variations and a tiny bit of free weaving.

The importance of the work is emphasized by the fact that occupational therapy is placed on a plane with the other classes which are more obviously necessary in a nurses' training with the same standards required in attendance and marks.

Those who find hand work interesting learn, in this way, a few simple problems which could be used for private patients. They all come to a realization that occupational therapy is not "easy" and that they are not, in any sense, trained to take up the work. A longer course might create this impression. In a hospital of this type nurses are much too busy to assist the patients in any way with their work, but they can be a very great help to the aides in many little ways, in pointing out the new patients for whom they are looking by looking after our property when patients are discharged between visits, etc.

Probably the greatest benefit is the interest that they take in what the patients are doing.

Wisconsin

Every nurse in training at Columbia Hospital, Milwaukee, is required to take a six-week course in occupational therapy.

Attendants showing ability are assigned to the occupational therapy department in the insane hospitals where they may work up to being assistants.

A REGRETTABLE OMISSION

The editors regret that the St. Louis School for Occupational Therapy was omitted in the list of regular training schools published in the April Roll Call. The St. Louis School recently has lengthened its course to two years, an advance step in the training of aides, and on September 25, 1923, begins its fifth year of service.

SPRINKLER SYSTEM INSTALLED

A significant improvement has been made in the equipment of Hartford Hospital the past year by the installation of a sprinkler system in all of the buildings. This improvement cost $20,400, but it is estimated it will reduce the fire insurance cost $5,500 over a three-year period.

Before this system was installed, fire insurance cost $10,000 for the same period. The institution will thus realize an income of seven and one-third per cent on the investment which will pay for itself in thirteen years.

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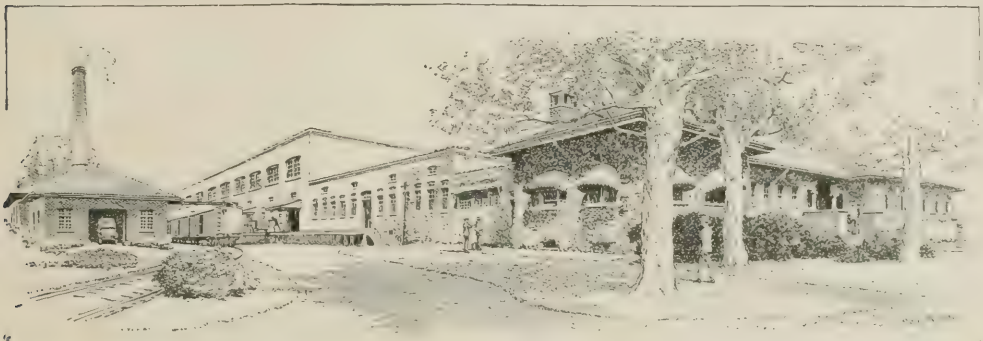
"America's Most Famous Dessert"



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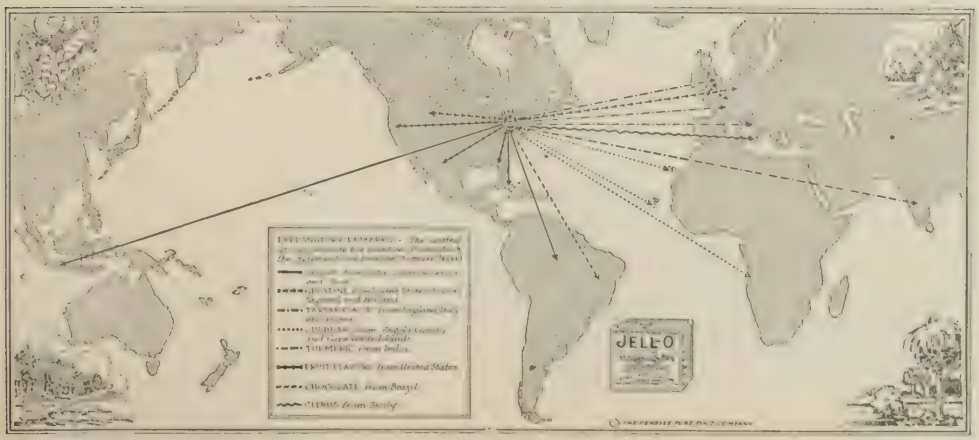

MEETINGS, CONVENTIONS AND CONFERENCES

GRATIFYING INNOVATIONS CHARACTERIZE AMERICAN HOSPITAL ASSOCIATION'S PROGRAM

A TENTATIVE but rather complete program of its twenty-fifth annual conference to be held at Milwaukee, October 29 to November 2, has just been issued by the American Hospital Association. The program of the conference presents several very gratifying innovations which have been advocated by THE MODERN HOSPITAL for several years.

One of the innovations concerns the presentation of the various reports of the committees, of which there will be more this year than ever before. These will be submitted in early general sessions of the conference by the chairmen of the different committees, who, in presenting their reports, will outline their contents in brief five minute addresses. Each report will then be made a special order for a specified time at a later section meeting, when a definite length of time will be devoted to their interpretation and discussion. In the meantime, printed copies of these reports will be placed in the hands of all the delegates.

Under this plan, eight reports will be submitted at the convention's opening general session, Monday afternoon, October 29. At the general session, Tuesday morning, ten additional reports will be submitted.

The chairmen of the various section meetings will receive very definite instruction to begin the meetings promptly and limit the discussions and the papers to the time allotted to them. In addition to the customary reports of the trustees, the treasurer, the executive secretary, and the various standing and special committees which submitted reports at the last convention, there will be reports from several other committees appointed during the past year, notably the committees on canned fruits and vegetables, general furnishings and supplies, interns, and the relation of hospitals to public health activities.

Another forward step in the arrangement of the program is the larger amount of time definitely set aside for the exhibition of equipment and supplies and the limitation of most of the sessions of the conference to one and a half hours. Generally speaking, the hours from 11 a. m. to 2:30 p. m. and from 4 to 8 p. m., except such time as the delegates elect to spend at luncheon and dinner, may be devoted to the study of the various exhibits.

President Asa S. Bacon has been fortunate in obtaining a definite promise from the Honorable John J. Blaine, governor of the state of Wisconsin, to deliver the address of welcome at the opening general session Monday afternoon, October 29th. Following this address Mr. Bacon will deliver his presidential address. The remainder of this session will be devoted to the presentation of various reports.

The general session on Monday evening will be devoted to hospital standardization and will be conducted by the American College of Surgeons under the chairmanship of Dr. Franklin H. Martin, director-general. The specific topics to be discussed at this meeting are, "The Practical Application of the Minimum Standard," by Dr. M. T. MacEachern; "Hospital Standards," by Mr. Robert Jolly; and "The Relation of the American College of Surgeons to Hospital Standardization," by Dr. Franklin H. Martin, director-general of the American College of Surgeons.

All of Tuesday morning's session will be devoted to a presentation of reports by special and standing committees. Among the speakers at Tuesday evening general session are Dr. J. H. Kellogg, superintendent, Battle Creek Sanitarium, Battle Creek, Mich., and Mr. W. J. Raddatz, president, Cleveland Hospital Council, Cleveland, O. The former will answer the question "Should General Hospitals Establish Departments of Therapy?", and the latter will speak on "Team Work Among Hospitals."

The general session on Wednesday morning offers a varied program which promises to be most interesting. Mrs. Perkins B. Bass, president, Woman's Auxiliary Board, Presbyterian Hospital, Chicago, will speak on women's work in hospitals. Mrs. Frank G. Watson, of Chicago, will speak on hospital insurance. Mr. Chas. S. Pitcher, superintendent, Presbyterian Hospital, Philadelphia, will attempt to show how the value of supplies and equipment can be taught to hospital personnel. Dr. S. S. Goldwater, director, Mount Sinai Hospital, New York City, who is now in Europe, will present his report as the representative of the American Hospital Association at the 800th anniversary of St. Bartholomew's Hospital, London.

Those who are interested in nursing problems will wish to attend the nursing section meeting which will be held Thursday morning, November 1. At this section Miss Edna Foley of the Visiting Nurse Association, Chicago, will discuss the opportunities of service which are being offered to the graduate nurse. Miss Carolyn E. Gray, Department of Nursing Education, College for Women, Western Reserve University, Cleveland, O., will follow with an address on the classification of nursing schools. Miss Sophie Nelson, president, Boston Health League, Boston, Mass., will discuss child health. The session will close with a paper on the health of the student nurse by Dr. Carolyn Hedgar, Chicago.

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One of the interesting features of the conferences will be a series of short talks on many topics at the general session Thursday evening. The first of these talks will be given by Dr. Frederick B. Moorhead, dean of the Dental Department, University of Illinois, Chicago. His topic is "Hospital Dentistry." "Nitrous Oxide Gas in Obstetrics," is the subject of the second talk. This will be given by Dr. C. Henry Davis, Milwaukee, Wis. "Attracting Nursing Pupils," is the topic of a talk to be given by Miss Carol L. Martin, Secretary, Central Council of Nursing Education, Chicago. The fourth talk will be on "Religion in the Hospital," by the Reverend Wilson E. Donaldson, chaplain, Cook County Hospital, Chicago. Other talks will be scheduled later.

The general session on Friday morning will be devoted to a discussion on the following topics: "What the Hospital can do for the Relief and Prevention of Heart Disease"; "Prevention of Infection in Hospitals; and "The Children's Department of the Hospital." The first subject will be discussed by Dr. James B. Herrick, president, Chicago Society for the Relief and Prevention of Heart Disease; the second, by Dr. William Mayo, Rochester, Minnesota; and the third by Dr. H. M. Helmholz, Rochester, Minnesota. Interspersed among the general sessions, there will be various section meetings for the discussion of the reports submitted at the first two general sessions.

The closing session of the conference on Friday evening will be an open forum and banquet at which Dr. A. T. MacEachern will preside. Following the banquet, there will be a summarization of the accomplishment of the twenty-fifth annual conference by the new president, and criticisms and suggestions for the next year's work of the association by various members.

HOSPITAL EXECUTIVES OF FIVE STATES HOLD STIMULATING CONFERENCE

PRINCIPLES of hospital administration, the relation of the hospital to the health department, various phases of the nursing question, staff meetings, the relation of the hospital to the citizens of its community, and the standardization program of the American College of Surgeons, were the outstanding topics discussed at the first Five States Convention of the Minnesota, Wisconsin, Iowa, North and South Dakota hospitals held in the assembly hall of the Curtis Hotel in Minneapolis, May 17 to 19, 1923.

In the absence from the city of Mayor Leach, Dr. Fred L. Adair, president of the Hennepin County Medical Association, delivered a brief address of welcome in which he emphasized the importance of hospitals to physicians. He urged the development of community, township or county hospitals so constructed and managed as to provide adequate facilities for people of moderate means, the one great group of society for whom adequate hospital facilities are still grossly lacking.

Dr. H. L. Fritschel, superintendent of the Wisconsin General Hospital, Milwaukee, in assuming the chairmanship of the convention, addressed the delegation briefly on the inception and growth of the hospital movement with special reference to its growth in the five states represented at the convention. He urged the public at large to take a greater interest in hospitals.

Following Dr. Fritschel's address, Dr. A. O. Fonkalsrud, superintendent of Trinity Hospital, Minot, N. D., read a carefully thought out paper on "Special Problems of Hospital Administration." In this paper Dr. Fonkalsrud outlined the broad principles on which hospitals must be organized to obtain satisfactory results. The proper organization of the board of trustees, the medical staff and the administrative staff constitute the fundamentals without which no hospital can be well run. The basic principles and policies should be embodied in its articles of incorporation and its constitution in order that the executive officer may know exactly what the objectives of the institution are. Dr. Fonkalsrud made a plea for a flexible scheme of organization and emphasized the necessity for careful supervision if economy of operation was to be secured. He threw out a warning against one-man boards of trustees and medical staffs and cautioned his hearers not to violate the principle of divison of authority.

Among the qualifications of the workers in the hospital Dr. Fonkalsrud enumerated the ability to like and be liked, interest in one's work, a thoughtful, sympathetic attitude of mind, a desire to improve one's work, and thorough loyalty to the institution. Trustees, he felt, should recognize the value to the superintendent of reading the various hospital journals and attending hospital conventions. To avoid misunderstanding between the administrative heads of the hospitals and the medical staff a point of contact should be established between them in the form of a medical executive committee. The session closed with a prolonged and animated discussion of the question as to whether it were necessary for the superintendent of the hospital to be a graduate in medicine in order to fill his position successfully.

Thursday afternoon's session was devoted to a discussion of the comfort of patients in hospitals, hospital laboratories and the relationship of the hospital to the health

Delegates who attended the Five States Conference held at Minneapolis, May 17-19.

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We don't guess at our sterilization

(The superintendent and the surgical nurse were talking—Series XII)

"Morning, Miss Smith. That delegation from the South will be here today to look over our hospital. What can we show them that is out of the ordinary—that they can't see everywhere?"

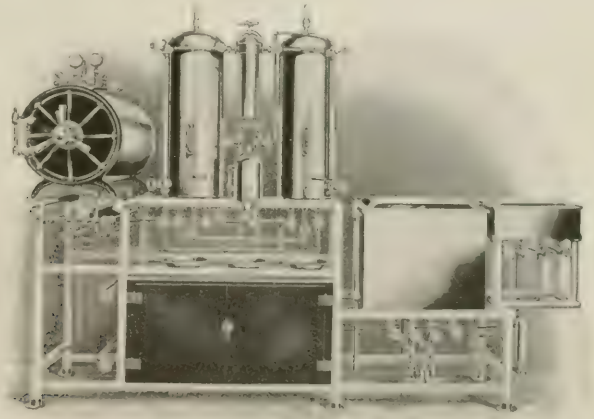
"Show them the sterilizers, Doctor, and preach a sermon to them on the need for careful sterilizing technique and sterilizers that are perfectly dependable."

"But every hospital has sterilizers, Miss Smith, and every nurse is taught the technique of sterilizing."

"I know, Doctor, but you don't seem to understand how valuable to us these Castle Sterilizers have been. We guess at nothing. We check our Dressing Sterilizer every day, with never a failure."

"But don't you think the majority of hospitals do the same thing."

"Doctor, I've had a good many years' experience in many hospitals and I have never known the freedom from worry about sterilizers that I have had since we installed the Castle outfit. They provide for exactly what we need."



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department. In introducing her subject, Miss Elizabeth Meyer, superintendent of nurses at St. Lukes Hospital, St. Paul, Minnesota, grouped the service the hospital rendered into two broad classes, personal and scientific. To the former, she devoted her paper. Miss Meyer stressed the necessity of receiving the patient in such a manner as to establish a comfortable mental attitude. She brought out that first impressions were generally determining and, of course, depended largely on the personnel in the admitting department. In the second place, there must be kindly, courteous treatment throughout the patient's stay in the institution.

Miss Meyer registered a burning protest against large wards, characterizing them as an abomination. Until they are abandoned, however, a place must be provided into which the very ill and dying may be moved. "Surely," said Miss Meyer, "the weight of the tragedy of illness as witnessed in large hospital wards cannot make for the patients comfort." In the speaker's opinion, some of the rules of not a few hospitals are petty, pedantic and irritating to patients. In formulating rules for visitors, executives should bear in mind the nature of the community the hospital serves, whether industrial, agricultural or residential.

Miss Meyer urged the hospitals to be the friend of the patient and meet his needs whenever possible. For instance, if the patient wants to communicate with his relatives or friends and is unable to write, let the hospital provide means whereby he can dictate his letter. In matters of this kind the women's auxiliary of the hospital can do much to make the patient comfortable. Miss Meyer urged that more attention be given to the comfort of the patient during convalescence. To this end, books, musical concerts and entertainments of one kind or another should be provided. She made a plea for the provision of anesthetizing rooms free from every suggestion of the pending operation and in charge of one not only technically trained to administer the anesthetic successfully but also surcharged with the spirit of human kindness.

The dietetic treatment of the patient should be based on the principle that each patient is an individual. To this end, in making out the diet the patient's nationality, religious faith, and so forth, should be taken into consideration. The dietitian, moreover, should do all that she can to counteract the patient's aversion to food. In closing her paper, Miss Meyer pointed out that the reputation of the hospital was determined not so much by its splendid building, its able administration, or the enviable reputation of its medical staff, but by the degree of comfort the patient enjoyed during his stay in the hospital.

In discussing Miss Meyer's paper, Mr. H. K. Thurston, superintendent of the Madison General Hospital, Madison, Wis., suggested that hospitals put forth a greater effort to make the relatives and friends of patients comfortable while in the hospital and not able to be in the patient's room.

Following Miss Meyer's paper, Dr. Kano Ikeda, pathologist of the Minneapolis General Hospital, read a comprehensive paper on the diagnostic laboratory of the small hospital. Dr. Ikeda chose this subject because he felt that small hospitals needed to be encouraged in the establishment of clinical laboratories. He urged superintendents not to think of their laboratories as paying propositions but rather as departments essential to the efficient care and treatment of the sick. He felt that the laboratory work of the hospital should be done preferably at the hospital rather than by the attending doctors in their own offices or at commercial laboratories, since the proximity of this laboratory to the sick reduces the time taken in making diagnosis and because it is free from the taint of commercialism. He urged small hospitals to bring their laboratories up to a high plane so that the doctors of the community would be anxious to bring their patients to the hospital for diagnosis.

Dr. Ikeda outlined the personnel, the services, the equipment and the financing of the small hospital laboratory. He expressed his conviction that even the small hospital should have a full time technician, that technicians should be registered by an official state board, just as pharmacists are registered, and that each small hospital ought to have a pathologist and a roentgenologist on a part time basis at least to guide the technician, examine the pathological specimens, and consult with the attending physicians on findings. Dr. Ikeda outlined the equipment and what he regarded as the minimum service such a hospital should perform. The laboratory should be located, he averred, in the choicest quarters of the hospital instead of in a dark basement, its size to be determined by the kind and scope of its work.

He made a plea for charging all patients a flat fee for laboratory work in order to guarantee the laboratory adequate funds for maintenance together with a strong personnel in order that all patients could get the laboratory services they needed, and also that the doctors might not hesitate to ask for whatever laboratory tests were necessary. Special charges should be made for more complicated tests. In Dr. Ikeda's judgment, the success of the work of the laboratory of a small hospital depends on the active support of and co-operation with the physicians who make the laboratory interpretations.

In discussing this paper, Mr. Fritschel felt that the ideal way to support the laboratory work of the small hospital is to endow it. Physicians would never hesitate then to ask for necessary laboratory tests. With possibly an occasional exception, Dr. Ikeda objected to the training of laboratory technicians in commercial laboratories, largely because their teaching material is limited.

Dr. F. E. Harrington, Health Commissioner of the City of Minneapolis, closed Thursday afternoon's session with a discussion on the hospital and the health department. He spoke on the part the hospital plays in the care of communicable diseases, and contended that every community should have a place to care for them. In Dr. Harrington's opinion, it is not the health department's duty to operate hospitals. He indicated that in Minneapolis, the health department and the city hospital are parts of one larger department, that of public welfare. It is not wise or economical, he felt, to force individual hospitals to maintain isolation wards for possible epidemics of contagious diseases, as such an arrangement holds up valuable space and often involves the hospital in a considerable outlay of income. He contended that provision should be made by each hospital to remove any suspected cases of disease to a central institution devoted to the care of these diseases. He bespoke greater co-operation between the hospital and the health department and said that this co-operation could be furthered if health officers would more uniformly approach hospitals in a gentlemanly manner and be received by them in a similar way.

He made a plea for the adoption of methods of preventing sickness on the ground that it was more economical to institutionalize comparatively well than desperately ill people. He spoke of a scheme under which the city of Minneapolis had institutionalized adult tuberculous patients for a period of ninety days in order to teach them how to live and how to avoid transmitting their disease to others. He asserted that this plan had been very successful and had been instrumental in getting these patients to spread the gospel of prevention among their

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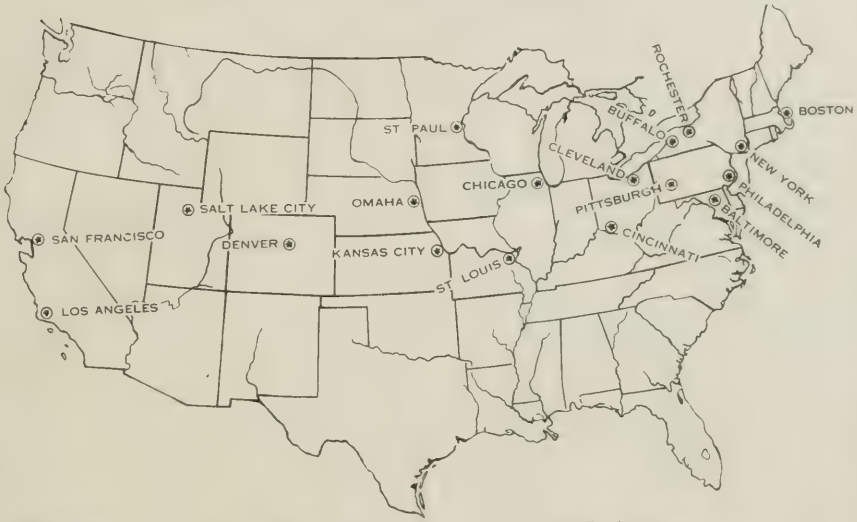

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relatives and friends. Dr. Harrington devoted the conclusion of his address to a description of what the city of Minneapolis is doing at Lymanhurst in teaching and training pretuberculous public school children. (See THE MODERN HOSPITAL, August, 1922 issue, page 102.)

Although Thursday evening was set aside for state meetings, only one state hospital association, that of Wisconsin, held a business meeting. In addition to the regular business, the following officers were elected for the year: President, Mr. H. L. Fritschel, superintendent Milwaukee Hospital; first vice-president, Dr. J. G. Meachan, superintendent, St. Luke's Hospital, Racine, Wisconsin; second vice-president, Mr. Edward Freschel, Mt. Sinai Hospital, Milwaukee; secretary and treasurer, Mr. H. K. Thurston, Madison General Hospital, Madison, Wisconsin. Dr. W. A. Henke, Grand View Hospital, La Crosse, was elected a director.

The first paper at Friday morning's session was devoted to recent reports on nursing education and was read by Miss Anna Eldridge. Miss Eldridge discussed in a very interesting but cursory manner the recent report of the committee on nursing and nursing education appointed by the Rockefeller Foundation, also the report on this subject of the committee appointed by the Council on Medical Education and Hospital of the American Hospital Association and the minority report of Dr. R. O. Beard of the committee.

Miss Eldridge's discussion of these reports was followed by a paper by Dr. R. O. Beard of the University of Minnesota on the hospital economics of the nursing situation. Dr. Beard felt that there was something primitive in the relationship of the hospital to the teaching of nursing. Unable to pay for the nursing services required, because of too heavy a tax on its exchequer, the hospital, he said had turned to the expedient of using the services of the nursing apprentice. Hitherto, the training of the nurse has been governed by the economic condition of the hospital rather than by the educational needs of the student. The quasi-charitable character of the hospital has made the public think of the hospital as more or less of a charitable activity. University schools of necessity have inspired a new voice in the nursing wilderness.

By various means, certain schools have increased their clientele but these will soon lose their potency unless they give the pupil nurses an adequate education. In furthering the education of the nurse, hospital economics and educational progress must be mutually considered and the education requirements of the nurse must not be swept aside by the economic needs of the institution. It is an economic folly for the hospital to refuse to employ help on the wards and thereby close the doors to dissatisfied pupils. Dr. Beard held that the educational conduct of the school of nurses should be left to an education committee and not to the board of trustees of the hospital and that the school should be given independent financial support. The budget of the hospital should not be charged with the educational work of the school. Dr. Beard dwelt upon the central school of nursing education, stating that such a school relieved the hospital of the responsibility of the mechanism of teaching and also afforded a more varied program than could otherwise be had. Dr. Beard contended that just as independent medical education by the hospital has been superseded so independent nursing education by the hospital will also cease.

The closing paper of this session was read by Miss Irene English, president of the Minnesota State Nursing Association. This paper was devoted to a discussion of the nursing situation in Minnesota. Miss English felt that if nursing schools and their work could be interpreted to the public, these schools would have more candidates than they now have.

Friday afternoon's session was devoted to a discussion of staff meetings, the utilization of hospital records, and the hospital intern. This was participated in by Dr. Charles R. Drake, chief of staff at the Swedish Hospital, Minneapolis; Dr. H. B. Sweetser, president of St. Mary's Hospital staff; Dr. E. P. Lyon and Dr. J. C. Litzenberg, and Dr. A. R. Warner, executive secretary of the American Hospital Association. Dr. Drake held that hospital medical staffs should be democratically organized and worked in harmony with the hospital governing board and executive. He suggested that the medical staff hold one business meeting and two scientific meetings. The business meeting should be devoted to the discussion of the subjects pertaining to the medical aspects of the hospital. He also urged that hospital authorities be guided by the medical staff in the purchasing of medical equipment and so forth. The scientific meetings should be devoted not only to a discussion of the cases of death that had occurred in the institution but also to the cases that had been treated successfully.

In speaking of hospital interns, Dr. Sweetser tried to show how hospitals might attract interns. He pointed out that the demands for interns greatly exceeds the supply and that many hospitals going without them were at a great disadvantage in their scientific and therapeutic work. To teach interns properly, hospitals should have patients representing many kinds of diseases (although the number of beds need not necessarily be large), adequate laboratory facilities, executives interested in the education of the intern, and a high grade visiting staff. The intern should have free access to pay, as well as ward patients.

The closing address on Friday evening was delivered by the Honorable L. C. Hodgson, Board of Control, City of St. Paul. The subject of his address was "The Hospital and the People." Mr. Hodgson emphasized the great need of publicity for the hospitals. He stated that the only time he ordinarily heard of a hospital was when something went wrong within its walls. Mr. Hodgson also pointed out that the Rotary Clubs and similar organizations could further the work of the hospitals in the community and enable superintendents to realize some of their ideals. He urged the necessity of always keeping the human factor in mind when aiming at the more efficient operation of the institution.

The second address of the evening was an address by Dr. Arthur Sweeney representing the Ramsey County Medical Association. He spoke on the hospital as an educational factor and pointed out the educational value of what the patients observed in the hospital, as, for example, the care with which the nurses and doctors handle the instruments and equipment in medical services.

The session was closed by an illustrated address by Dr. Malcolm T. MacEachern on how to establish various departments and install the records necessary to qualify for the American College of Surgeons' list of approved hospitals. The illustrations showed how to establish records, how to equip and operate the laboratory, how to conduct staff meetings and other points that make for better hospital administration. There were a number of commercial exhibits in the lobby of the hotel, which were visited by many of the delegates. Suitable resolutions were passed relative to the death of Dr. Arthur B. Ancker who was scheduled to conduct the round table discussion Friday afternoon.

Saturday May 19 was devoted by the delegates to visiting various hospitals, institutions and business houses in Minneapolis and St. Paul.

Adv. page 56

Heating problems are similar in hospitals and hotels

A SYSTEM of temperature control which is giving the utmost satisfaction in a great hotel should commend itself, surely, to the modern hospital in which heating problems are nearly identical.

In a city where hotels are many, the hotel which maintains its patronage must always please its guests. Rooms must neither be too warm nor too cold, and the temperature must be regulated to suit the individual preferences of its patrons.

To some extent the competitive element also enters into the selection of a hospital. Primarily, though, efficient temperature control is sought for its effect upon the health and comfort of the patient.

The vast Pennsylvania Hotel in New York City selected Bishop-Babcock Temperature Control after an exhaustive study of various systems. Commenting upon the wisdom of this choice, Mr. J. E. Elder, chief engineer, writes:

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PENNSYLVANIA ASSOCIATION HOLDS CONFERENCE

THE second annual meeting of the Hospital Association of Pennsylvania was held April 26 and 27 at the Hotel Adelphia, Philadelphia. It was hard to believe, after viewing the enthusiastic members and visitors and noting the success of the program and the exhibit of hospital supplies and equipment, that this association has not yet reached its second birthday. The conference was in all respects a marked success.

Not a few of those attending the meeting registered and made a preliminary inspection of the commercial exhibits on Wednesday evening before the opening of the convention program on Thursday. There was also on Wednesday evening a reception by the local committee.

The first session, Thursday morning, was opened with an invocation by the Rt. Rev. Thomas James Garland, bishop-suffragan of the Protestant Episcopal Church, following which Mayor J. Hampton Moore of Philadelphia, gave a cordial welcome on behalf of the city.

President Daniel D. Test read the names of those members of the association who had died during the past year, and for a few moments the assembly bowed heads in respect to the memory of those who had passed on.

"In hospital work," Mr. Test asserted in his presidential address, "one cannot just pay attention to one's own work and let the other fellow alone. Workers must unite and form community programs. There are at present approximately 300 hospital superintendents and 3,000 hospital trustees in the state. These facts present a challenge. The subject of paramount importance is rapid turnover among the superintendents. Eighty-five per cent of the superintendents in Philadelphia and 75 per cent of those in the state have been changed within a five-year period. One hospital had within this period six different superintendents; such a condition, perforce, being of considerable detriment to hospital, its employes and training school. President Test received 88 replies to 264 letters sent to hospital superintendents and the results of this inquiry show that 69 per cent of those replying had been in office less than five years. Thirty-four of the 88 answering the questionnaire had held their present position less than two years.

The causes of this deplorable condition as stated by Mr. Test are: The lack of understanding between the superintendent and the hospital manager who does not know and understand the superintendent as well as he does his employes; a similar lack of cooperation between the hospital trustees and the superintendent; lack of discipline in the institution; lack of suitable qualification in the superintendent himself; and selfishness on the part of some members of the medical staff owing to the fact that what the staff wants most is not the greatest need of the hospital.

Elmer E. Matthews of Wilkes-Barre is new president.

The afternoon session, Vice-president J. C. Biddle presiding, was opened with an address on "The Hospital's Relationship to the Community," by Michael M. Davis, Jr., executive secretary, Committee on Dispensary Development, United Hospital Fund of New York. Mr. Davis stated that the relationship expressed in his title is a new thing; that previously the hospital has been shut up within its four walls and has served only the poor, whereas in recent years it has developed into a community institution and serves everyone.

On the whole, Mr. Davis believes, hospitals have not moved forward as much as they should to meet community demands. Too often they have little real interest in the work and progress of the neighboring institutions, although the greatest benefit to the community can only be derived when all forces are coordinated and working in unison and harmony. National and state hospital associations have their functions, but in a large city the hospitals should have an organization of their own. This should not be for purely social reasons but for things more fundamental and constructive.

Mr. Davis brought out several practical points regarding the organization and administration of the out-patient department. There should be the closest possible relationship between the medical staff and administration of the out-patient department and the hospital, he declared. Why should the ambulatory case of today be treated by one group and if it happens to become a bed case tomorrow be passed on to a wholly new group that has to start with the individual as a new case? A special committee of trustees should give special attention to this department for it requires guidance; it should also have its own executive head for without such a head it "runs poorly or wild." The social service work of the out-patient department maintains the community contact.

In discussing Dr. Davis' paper, Mr. Sherman C. Kingsley, executive secretary of the Welfare Federation of

Adv. page 58

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THE place of original use of tea as a beverage is shrouded in mystery. Some say China; others India. It comes now from various countries of the Far East.

From Japan we get green teas; from China, green and black; from India, black; from Formosa, semi-black (Oolong); from Ceylon and Java, black. Green tea is unfermented; black is fermented.

Teas are known by various grade names—pekoe, orange pekoe, sou chong, young hyson, hyson, imperial—determined largely by the position of the leaves on the bush.

Of varieties there are many—at least two thousand. "Basket fired" means cured or fired in a basket.

Tea loves the mountains: "Purple of distant hills, silver of winding streams, emerald of thousands of tea plants—such are the surroundings of a tea plantation in Ceylon."

Picking begins three or four years after planting, and is done three or four times a year. The life of a bush is about twenty-five years.

In Japan everyone drinks tea. In the United States the consumption is one pound per person per year; in Australia, nine pounds. In the year 1922 a hundred million pounds were gathered.

Tea reaching the American consumer has passed a government inspection for purity and quality.

When you are tired or worried, a cup of tea will revive you, and is not injurious.

One pound of tea should make 300 to 400 cups. The cost, therefore, is so small that only the best should be used.

Don't boil the tea. Boil the water and pour it over the tea, letting it brew three or four minutes; then pour off.

Don't use a metal pot or strainer, unless of silver or aluminum.

For Iced Tea we recommend a good blend of India and Ceylon.

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Philadelphia, spoke of the aid that hospitals give in the social work of a large city, illustrating his point with personal experiences. He said that he believed the hospital would in the future reach out more and more into constructive health work.

The discussion was carried on by Dr. Harold L. Foss, surgeon-in-chief, Geisinger Memorial Hospital, Danville, Pa. Dr. Foss stressed the need of having trustees that are in touch with business—men that appreciate the complexity of the modern hospital and who are willing to subscribe to hospital journals and read them. The standard of the American College of Surgeons should be adhered to and patients followed up after leaving the hospital. The hospital must be interested in the community if the community is to become interested in the hospital.

Cutting Down the Food Waste

"Feeding the Hospital Population," by Dr. Henry L. Klopp, superintendent, Homeopathic State Hospital for the Insane, was the second paper of the afternoon. Food, according to Dr. Klopp, should be inexpensive, plain, abundant, easily prepared, and not susceptible to waste. Variety of diet is of the utmost importance and must not be overlooked. The speaker said that on entering his present position he vowed against the use of the sterotyped menu. The bill of fare at Allentown is made up from day to day and economy and efficiency have resulted. Hot food is not served until the patients are seated in the various dining rooms. Helpings are measured with the idea of giving the patients a second helping if they want it. In this way the food left on the plates is minimized. Food remaining in the original dishes in which it was placed on the table is returned to the kitchen and utilized. One person conducts the food accounting system and weighs all food returned and all wasted. The waste per capita per day during June, July and August was found to be five ounces, and for the remainder of the year slightly over four ounces.

Dr. B. Franklin Stahl, lecturer on dietetics at the University of Pennsylvania medical school was the first to discuss Dr. Klopp's paper. He said that patients should be allowed to select their own dosage of the various types of food, and that "surprise to the palate is of more value to the sick than to the well."

Miss Helen E. Gilson, chief dietitian at the Pennsylvania Hospital, dwelt on the need of figuring cost from the standpoint of meals served rather than on the basis of population. This is especially true if employes are served in a cafeteria, since over the week end the number of meals served there may decrease materially. Miss Gilson also said that in figuring the cost of any special food it is necessary to determine the cost of cooking. Additional work and fuel may more than counterbalance a slight saving on the original cost.

Miss M. Adelaide Nutting of the department of nursing and health, Teachers' College, Columbia University, read the final paper of the session which dealt with the question, "How shall the Hospital Properly Care for its Patients and at the Same Time Properly Educate the Nurse?"

"The root of the problem lies in removing the nursing school from the administration of the hospital," said Miss Nutting. "It is little use to cling despairingly to methods of the past. The commonplaces of every other form of education have been lacking in the education of nurses."

The speaker was, however, far from pessimistic regarding the future of nursing education and stated that the founding of schools of a new type at Cleveland and Yale University, as indicated in recent announcements, is an example of the new movement.

Following this full program of the day members and guests met again at seven in the evening for an informal dinner at the Hotel Adelphia and listened to speeches both humorous and serious. Among the speakers were the Rev. Floyd W. Tompkins, rector of Holy Trinity Church, Philadelphia; William Potter, president of the board of trustees of Jefferson Medical College and Hospital; Dr. A. R. Warner, executive secretary of the American Hospital Association; Michael M. Davis, Jr.; and Dr. E. J. Cattell, field secretary, Philadelphia Chamber of Commerce.

The opening of the second day found President Test again in the chair. Miss Margaret Dunlop, superintendent of Nurses at the Pennsylvania Hospital, was introduced as the leader of a round table discussion on nursing problems. The dilemma of the superintendent of nurses was clearly stated: if she has any humanity at all she will see that the patients are well nursed and if she has any concern for the public she will see that the students are well trained.

Many points were brought out in the general discussion that followed Miss Dunlop's statements of the problems. Some statements made were: The woman in training does not have fair play when the superintendent of nurses is changed three times within a year; of 214 graduates during a fourteen-year period from one school 40 per cent got married, a condition for which no one can be blamed but one which serves to accentuate the shortage of nurses; there is a lack of persons delegated with the duty of interesting girls of high school age in nursing as a profession.

The second round table of the session, under the leadership of F. E. Brooke, superintendent of the Harrisburg Hospital, dealt with the problems of the small hospital. Among the topics discussed were: the laundry; the help problem, orderlies, night watchmen, cooks, etc.; the stock room—how to comply with the requirements of the state; fair average of employes in a 100-bed hospital outside of the nursing staff; how to impress on the doctor the need of being punctual when scheduled for an operation; and should a physician or a nurse anesthetist be employed.

There appeared to be some division in regard to the number of employes needed in a 100-bed hospital. Some contended that an employe per bed was not too great a number, while those objecting to this agreed that such a ratio was fairly satisfactory if the nursing staff were included. The problem of the nurse anesthetist brought forth the liveliest discussion of all; some were unequivocally for the nurses and others for the doctor. Dr. Joseph C. Doane of the Philadelphia General Hospital expressed a sane view of the problem in the last speech of the session. He said that it was not fair for anyone to state that either nurses or doctors were better anesthetists than the others. There are some nurses better than many doctors and some doctors better than many nurses. Ability depends on the individual and not on the title.

E. E. Matthews Is New President

Following the lunch hour the convention assembled in a business meeting, listened to the reports of various committees and officers and then proceeded to the election of officers for the coming year. The following were unanimously elected: President, Elmer E. Matthews, superintendent, Wilkes-Barre City Hospital, Wilkes-Barre; first vice-president, Miss Jessie E. Turnbull, Elizabeth Steele Magee Hospital, Pittsburgh; second vice-president, Charles S. Pitcher, Presbyterian Hospital, Philadelphia; treasurer, Dr. George W. Reese, State Hospital,

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Following the business meeting the convention proceeded without pause to the program of the final session. Dr. Charles H. Miner, state commissioner of health, reviewed the accomplishments of the state department of health and spoke of the importance of the hospital in relation to the public health program.

Dr. Ellen C. Potter, state commissioner of welfare, spoke on the present dilemma of the state relative to state aid for hospitals. Pennsylvania has for many years given much financial support in the form of reimbursements for care of the sick poor. This year all the state departments have suffered from a reduction of approximately 30 per cent in their appropriations. The department of welfare has suffered a like cut and there will be but $3,600,000 available for hospital aid.

The discussion which followed seemed to show that the hospital workers believe that because Pennsylvania is doing more for its hospitals than other states is no indication that it is beyond its proper scope of activity but rather that it is in the forefront of the movement of progress in welfare work.

The installation of President-elect Matthews by President Test concluded the session.

Immediately following the close of the convention a meeting of the trustees was held at which John M. Smith, superintendent of the Hahneman Hospital, Philadelphia, was reelected executive secretary of the association for the coming year. It was also decided to hold the next annual meeting of the association in Pittsburgh next spring, the exact date being as yet undecided.

INDIANA WORKERS GATHER IN CONVENTION AT INDIANAPOLIS

THE Indiana Hospital Association held its third annual meeting at the Hotel Lincoln in Indianapolis on Wednesday April 18. The convention was in session throughout the day, the morning being given over chiefly to the business matters pertaining to the organization, to President C. S. Woods' address and a discussion on "The Relation of the Physician to the Hospital" which was led by Dr. M. T. MacEachern, president-elect of the American Hospital Association. Dr. Woods in his address exhorted hospitals in Indiana to come to a proper realization of the value of the Indiana Association in the hospital field both in the state and nation, emphasizing the fact that a well-organized and conducted hospital association can be a most important factor in promoting an inspirational and animated program of hospital betterment in the individual hospital. He urged the entire personnel of the hospital organizations throughout the state to lend their support to the association program.

The association was much gratified at its good fortune in having Dr. MacEachern present. His discussion on "The Relation of the Physician to the Hospital" brought forth some vital and interesting facts on the subject. Dr. MacEachern urged hospitals to encourage the appointment of physicians on various committees in this organization, who would bear important responsibilities in administrative activities of the institution, such as the x-ray department, operating room technique, laboratory conduct and other important activities.

A paper by Mrs. Mary J. Davis, dietitian of the Indianapolis City Hospital on "The Place of the Dietitian in the Hospital" was well received. It emphasized the fact that the dietitian occupies a most strategic position in the hospital organization in view of the fact that modern medicine is making scientific dietary demands upon the hospital. "The Buying, Preparation and Use of Foods" by Mrs. Margaret Marlow, dietitian at the Indianapolis Methodist Hospital, and "The Responsibilities of the Hospital for the Adequate Care of the Patient" by Miss Josephine Mulville, superintendent of nurses at the Indianapolis City Hospital, brought forth many interesting and helpful comments on the subjects.

During the afternoon session a program of varied subjects of interest to practically all persons of the hospital organization was given. Mr. Fred D. Rose, a trustee of the Home Hospital, Muncie, gave an interesting account of the relation of the board of trustees in his institution, indicating some unusually helpful and cooperative activities on the part of trustees in hospital administrative matters. A paper on "Hospital Per Diem Cost" was presented by Robert E. Neff, administrator of the Robert W. Long Hospital, Indianapolis. Mr. Neff declared the importance of a proper and adequate cost-finding system in all hospitals regardless of size, urging that accurate cost figures should be kept not only for comparative usage with certain accepted standards but for the reason that such figures would enable the busy executive to have facts and figures in such form and clarity as to make it possible for him to visualize conditions readily in the various departments. Hospital standardization with illustrations by lantern slides was presented by Dr. MacEachern. His talk was most enlightening and was enthusiastically received. Dr. MacEachern explained fully the standardization program as presented by the American College of Surgeons in its various endeavors for hospital betterment. Certain fundamentals in the standardization program were explained in detail with the result that the program was doubtlessly popularized in the minds of all present.

"Pancreatic Extracts in Diabetes" by Dr. A. L. Walters of the scientific department of the Eli Lilly Company was of interest, and the rapidly increasing use of iletin was discussed in its many phases. The program closed with the report on a survey of laboratory work of hospitals in Indiana by Dr. W. H. Shimer, director of the laboratory, St. Vincent's Hospital, Indianapolis. The survey which had been conducted by Dr. Shimer showed that a good percentage of hospitals in the state now realize the importance of properly equipped and adequate laboratory facilities and are offering laboratory services of very high character.

Officers for the ensuing year were elected as follows:

President, Robert E. Neff, administrator, Robert W. Long Hospital, Indianapolis.

First vice president, Sister Rose, St. Vincent's Hospital, Indianapolis.

Second vice president, Miss Lillian E. Barlow, superintendent, Witham Memorial Hospital, Lebanon.

Secretary, Miss Harriett Jones, superintendent, Bloomington Hospital, Bloomington.

Treasurer, Mrs. Ethel P. Clark, director, training school for nurses, Indiana University, Indianapolis.

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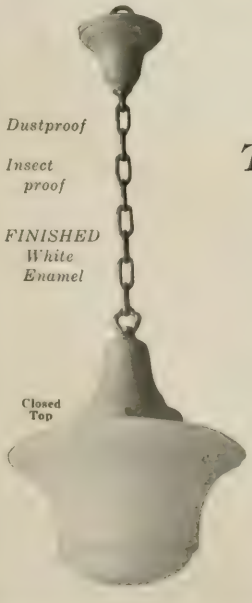

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SOUTH CAROLINA HOLDS THIRD ANNUAL CONVENTION

At the third annual meeting of the South Carolina Hospital Association held in Charleston, April 19 and 20, the following were elected officers for the ensuing year: F. Oliver Bates, Charleston, president; Miss A. B. Commer, Florence, first vice president; Miss Mary C. McKenna, Columbia, second vice president; W. Julian Clarke, Columbia, secretary and treasurer; Miss Anastasia McConnell, Charleston, chairman of the publicity committee.

To the board of trustees, W. King McDowell, Charleston, was reelected and Miss Etta Robbins, Camden, was elected, each to serve three years. The terms of Dr. C. F. Williams, Columbia, and Dr. E. A. Hines, Seneca, as trustees, expire next year, and those of Miss Myrtle Webber, Gaffney, and Dr. C. W. Kollock, Charleston, in 1925.

Members of the South Carolina Hospital Association met with the South Carolina Medical Association and the South Carolina Nurses Association at noon of the opening day to hear an address by Miss Clara D. Noyes, chairman of the bureau of nursing American Red Cross, Washington, the speaker being introduced by Dr. Charles W. Kollock, of Charleston. Miss Noyes delivered a most interesting and informative address, which included a comprehensive review of the history of nursing in the United States, an account of the great work of the nurses in the World War, and suggestions for the betterment of the nursing service.

The afternoon session of the hospital association was presided over by Mr. F. O. Bates, superintendent of the Roper Hospital, and secretary and treasurer of the association, in the absence of the president, Dr. A. L. Smathers of Anderson. In the absence of W. Julian Clarke, superintendent of the Columbia Hospital and chairman of the publicity committee, the report of that committee was read by Miss Mary C. McKenna, superintendent of nurses, Columbia Hospital, and the treasurer's report was made by Mr. Bates.

An informal discussion of hospital problems and methods and a general exchange of views on relative subjects marked the meeting, which was concluded with the election of officers and consideration of the time and place of the next meeting of the association. The next gathering will be at Orangeburg, where the annual convention of the South Carolina Medical Association will be held, the date not yet determined. It was decided that the hospital association should meet on the day prior to the beginning of the latter convention.

The annual meeting was concluded on April 20 by a visit to Charleston hospitals, starting at 10 o'clock, the following hospitals being visited: Roper Hospital, Baker Sanatorium, St. Francis Infirmary, and Mercy Maternity Hospital.

Among those who registered at the meeting were: Miss Sarah P. Lawrence, Anderson; Miss Etta L. Robbins, Camden; Miss Mary C. McKenna, Columbia; Miss Anastasia McConnell, Charleston; Miss Katherine Hagquist, Greenville; Miss Myrtle Webber, Gaffney; Miss A. B. Commer, Florence; Miss Georgia H. Riley, Charleston; Miss M. E. Heinreich, Sumter; Dr. A. E. Hines, Seneca; Dr. C. W. Kollock, and F. O. Bates, Charleston.

"An act of kindness that gives joy, growing spontaneously out of pure love without a money reason, without any hope of reward, wholly without any hope of reward, wholly without selfish purpose, that is the most divinely human thing—that, my friends, is the greatest thing in the world."

150 ATTEND NORTH CAROLINA HOSPITAL MEETING

The sixth annual meeting of the North Carolina Hospital Association was held at Kenilworth Inn, Asheville, on April 16, with Dr. Eugene B. Glenn in the president's chair and Dr. James R. Alexander of Charlotte occupying the posts of secretary and treasurer. A very full program had been arranged. Attendance was more than 150, which is the largest in the history of the association, and the interest was keen. The papers were very thoroughly discussed. A large number of hospital supply houses were present with displays that were interesting to the hospital executives.

The association went on record with only one dissenting vote to have the laws repealed that were controlling the hospitals in North Carolina, and it asked that the Nurses' Association of the state appoint a committee of three to meet with a similar committee from the Hospital Association, to see that these laws were repealed. The association also condemned the interference of graduate nurses with the work of hospitals when they were doing special duty in hospitals.

The following were among those who gave the addresses: Dr. John D. McRae of Asheville; Miss Elizabeth Redwine of Asheville; Dr. C. M. Strong of Charlotte; Dr. L. A. Crowell of Lincolnton; Miss Montgomery Scarborough of Charlotte; Dr. C. A. Woodward of Wilson; Miss Elizabeth Connolly of Sanatorium; Dr. James R. Alexander of Charlotte; Dr. William Spicer of Goldsboro; Dr. Thomas M. Jordan of Raleigh; Dr. C. S. Lawrence of Winston-Salem; Dr. D. A. Garrison of Gastonia; Dr. Harold Glascock of Raleigh; and Dr. J. T. Burrus of High Point. Miss Margaret Brogden, chief of social service at Johns Hopkins Hospital, Baltimore, spoke on "The Importance of Social Service Work in Connection with Hospital Administration."

Dr. L. A. Crowell of Lincolnton, was elected president; Dr. Thomas M. Jordan, first vice president; and Miss Nina Davidson, second vice president; Dr. Eugene B. Glenn of Asheville, Dr. J. A. Williams of Greensboro, and Dr. E. F. Dickinson of Wilson were elected as the executive committee. Dr. J. M. Parrott of Kinston, Dr. J. F. Highsmith of Fayetteville, Dr. J. R. Alexander of Charlotte, were appointed as the legislative committee.

Our clinics aim to serve the poor, and their registrars are at some pains to see that this purpose is not defeated, says a recent *Bulletin of the New York Nursery and Child's Hospital.* But candor compels the confession that any one of our workers can match the following anecdote.

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The mention of the real estate business led away from the cheapest accommodations. "You could see your husband every day in a private room," the registrar suggested to the wife.

The woman tossed her head. "I got over wanting to see him that often. I'll go in the ward."

But when, half an hour later, the woman came from the clinic and told her husband that the fee for examination and medicine was 48 cents, he handed the clerk a hundred-dollar bill to change.

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Book Reviews and Current Hospital Literature

QUANTITY COOKERY

By Lenore Richards, B.A. and Nola Treat, B.S.[1]

To the manager of a kitchen serving large numbers of people this book will be of much help for three reasons: first, because of the material presented; second, because the recipes are reliable, and third, because the material is so arranged that one can quickly and easily find the information wanted. All of these factors are of importance to one doing quantity cookery.

The material presented is as follows:

Principles Underlying the Planning of Menus for Large Numbers.

Standards for Judging Meals.

Type of Menus.

Suggestive Charts and Lists to be Used in Menu Planning.

The Importance and Use of Forms.

Recipes.

Table of Weights and Their Approximate Measures.

In the suggestive charts and lists the foods are listed according to class, which facilitates menu making, to seasonal food and to popular food combinations. The recipes include the number of servings and amount of one serving, a welcome addition to the usual recipe; the directions are plainly given and the ingredients are in tabulated form so that one can readily get the combination.

The three first chapters contain suggestions and advice in menu making which are sensible and workable.

This book gives evidence of the authors' knowledge of the subject as well as of a great amount of work and thought in its preparation. Dietitians have reason to be grateful to Miss Richards and Miss Treat.—L. G. G.

REST AND OTHER THINGS

By Allen K. Krause, A.M., M.D., Associate Professor of Medicine, Johns Hopkins University; Director, Dows Tuberculosis Research Fund, Johns Hopkins University; Physician in Charge, Phipps Tuberculosis Dispensary, Johns Hopkins Hospital; Lecturer Trudeau School of Tuberculosis; Editor, American Review of Tuberculosis[2].

Those who, because of wide public health interest as clinicians or individual interest as laymen, seek for a better understanding of their patients' problems or of their own troubles, will find in this little book a message which may have sought to put into words.

The papers are sympathetic, and their style is fascinating. The author establishes an analysis upon a pure basis of fact but in a fabric which is as entertaining as fiction. Filled with truths which may prove vital to everyone and to every public health undertaking, Dr. Krause shares his experience in the tuberculosis field and in other fields of information.

"Rest and Other Things" will be of interest to the physician, the nurse, the public health and social service worker, the patient and the layman interested in tuberculosis. Some indication of its contents may be obtained from the following chapter headings: I. Rest. II. The Treatment of Tuberculosis. III. Sputum Infection of Children. IV. Adult Tuberculosis from Childhood Infection and its Prevention. V. Antituberculosis Measures. VI. The Tuberculosis Problem. VII. The Elements of an Adequate Tuberculosis Program. VIII. Some Problems of Medicine Education in Tuberculosis.

FOOD AND THE PRINCIPLES OF DIETETICS

By Robert Hutchison, M.D., Edinburgh, Scotland, F.R.C.P.[3]

For many years Dr. Hutchison's Book "Food and Dietetics" was considered necessary to the libraries of physicians interested in nutrition and to dietitians; the fifth edition has been revised sufficiently to enable this book to retain its place among the best authorities of today.

In the first chapters the subjects of food composition, food values, the amount of food required in health and conditions which influence this amount, are discussed somewhat in detail and present a great deal of valuable information. This is not a scientific discussion and the intelligent layman will find it a very readable story.

About 350 pages are devoted to foods and food materials covering the more important points of foods as such, as well as their digestion and utilization in the body. Following this are chapters on principles of feeding in infancy and childhood and principles in feeding in disease, and in the last chapters are given some interesting facts about artificial foods and commercial preparations.

A brief review does small justice to the contents of approximately 600 pages of practical information. This information is not given merely as isolated facts but all is so correlated that the title of the book is fully justified. Much common sense is interjected throughout the book which might not come under the specific classification of dietetics, but is, nevertheless, important in feeding people.—L. G. G.

SOCIAL WORK, ITS PROFESSIONAL ASPECTS*

An interesting publication which the American Association of Social Workers has recently issued is a small thirty-one page pamphlet called "Social Work, an Outline of its Professional Aspects." By describing briefly, yet comprehensively, the various lines of activity open to the social worker and telling the sort of training necessary for work along each of these lines, the little book no doubt fills a decided need in its particular field.

1. Little, Brown & Co., Boston, Mass., 1922.
2. Williams & Wilkins Company, Baltimore, February, 1923.
3. William Wood & Company, New York, 1922.
*American Association of Social Workers, 1923.

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